



JAPAN RADIO TEST REPORT

Client Information:

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Manufacturer: Hangzhou Yinshang Intelligent Technology Co., Ltd.
Manufacturer add.: Room E2051,2nd Floor, Building 1(South), No.368 Liuhe Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province
Brand Name: N/A

Product Information:

Product Name: D mooster Wireless Bluetooth Earphones
Model No.: D95
Derivative model No.: N/A

Test Date: Jan. 30 to Feb. 06, 2026 Issue Date: Feb. 06, 2026
Test Standard: Article 2 paragraph 1 of item 19

Test Result: PASS

Shenzhen iTC Product Testing Co., Ltd.

Issued by: Add. : 103, Building 1 South, Dayang Industrial Zone, Lougang Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China

This device described above has been tested by ITC, and the test results show that the equipment under test (EUT) is in compliance with the ARIB STD T-66 requirements. And it is applicable only to the tested sample identified in the report.

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Tested by Max Zhuang

Reviewed by Apple Huang

Approved by John Liu



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Test result presented in this test report is applicable to the tested sample only

**Report Revision History**

Report No.	Report Version	Description	Issue Date
26ITC0130509W	NONE	Original	Feb. 06, 2026

Test site information

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Article 2 paragraph 1 of item 19			
Standard Section	Test Item	Judgment	Remark
General provisions			
5	Frequency Error	PASS	
6	Occupied Bandwidth	PASS	
7	Spurious Emissions Intensity	PASS	
8	Radio Interference Prevention Capability Measurement	PASS	
Transmitting equipment			
14	Antenna Power	PASS	
14.2	SAR	N/A	
Transmitting antenna			
20	Type, Configuration, etc., of Transmitting Antenna	PASS	
22	Direction Pattern of Transmitting Antenna (Provided at Individual Antenna Report)	PASS	
Receiving antenna			
24	Limitation of Collateral Emission of Receiver	PASS	
26	Refer to All Articles for Transmitting Antenna	PASS	
Operating frequency 2400~2483.5MHz			
49.20(1);a	RF Shielding Method	PASS	
49.20(1);a	Communication Method	PASS	
49.20(1);b	Spread-spectrum Method	PASS	
49.20(1);c	Antenna Power	PASS	
49.20(1);d	Absolute Antenna Gain (Provided at Individual Antenna Report)	PASS	
49.20(1);e	Spread-Spectrum Bandwidth	PASS	
49.20(1);f	Spreading Factor	PASS	
49.20(1);g	Hopping Frequency Dwell Time (FH employed)	PASS	

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report

1.1 TEST FACILITY

Shenzhen iTC Product Testing Co., Ltd.

Add. : 103, Building 1 South, Dayang Industrial Zone, Lougang Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 3.2\text{dB}$
2	Radiated Emission Test	$\pm 4.7\text{dB}$
3	RF power,conducted	$\pm 0.16\text{dB}$
4	Spurious emissions,conducted	$\pm 0.21\text{dB}$
5	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
6	All emissions,radiated(>1G)	$\pm 5.0\text{dB}$
7	Frequency error ppm	$\pm 0.5\text{ppm}$



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	D mooster Wireless Bluetooth Earphones
Brand Name	N/A
Model Name	D95
Model Difference	N/A
Product Description	Operation Frequency: 2402~2480 MHz
	Bit Rate of Transmitter: GFSK+ π /4-DPSK +8DPSK
	BT Version: V5.3
	Number Of Channel: 79 CH
	Antenna Designation: Please see Note 3.
Channel List	Antenna Gain(Peak): 2.25dBi
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Power Source	Please refer to the Note 2.
Adapter information	DC3.7V from battery
Battery	N/A
Hardware Version	DC3.7V 30mAh
Software Version	HV01
	SV01

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	RANT3216F245C03	Chip Antenna	N/A	2.25	

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	GFSK(CH00 CH39 CH78)
Mode 2	$\pi/4$ -DPSK (CH00 CH39 CH78)
Mode 3	8DPSK (CH00 CH39 CH78)

For Radiated Emission	
Final Test Mode	Description
Mode 1	GFSK(CH00 CH39 CH78)
Mode 2	$\pi/4$ -DPSK (CH00 CH39 CH78)
Mode 3	8DPSK (CH00 CH39 CH78)

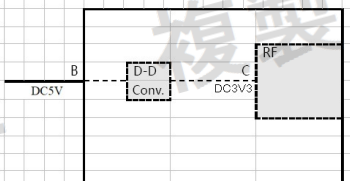
2.3 TEST CONDITIONS

The BT module was tested while in a continuous transmitter/receiver mode.

The EUT was tuned to a low, middle, and high channel for all tests. For all test case pre/scans were completed in all Modes to determine worst case levels.

Power Supply Voltage Fluctuation Test

Voltage Fluctuation Test	Normal Voltage	High Voltage +10% of Normal Voltage	Low Voltage -10% of Normal Voltage
Input DC Power	5.0V	5.5V	4.5V
Voltage Variation (%)	3.3V	3.3V	3.3V

 Test below: 1: The fluctuation of C point is under $\pm 1\%$, when input voltage from B point to the test equipment is fluctuated by $\pm 10\%$. 2: The fluctuation of C point is under $\pm 1\%$, when input voltage from A point to the test equipment is fluctuated by $\pm 10\%$.		The EUT has the input voltage to the circuit of RF unit complies with output voltage limitation ($\pm 1\%$) against input voltage fluctuation ($\pm 10\%$). So, all measurements were conducted at only rated voltage DC 3.3V.	
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NOTE:

Voltage Variation (%)

= (Output high or Low Voltage - Output Normal Voltage) / Output Normal Voltage * 100

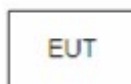
2.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of FHSS

Test software Version	Test program: BT_Tool		
Frequency	2402 MHz	2441 MHz	2480 MHz
Parameters	DEF	DEF	DEF

2.5 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Block diagram of EUT configuration(TX Mode)



Note:

1. The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

2.6 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	D mooster Wireless Bluetooth Earphones	N/A	D95	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

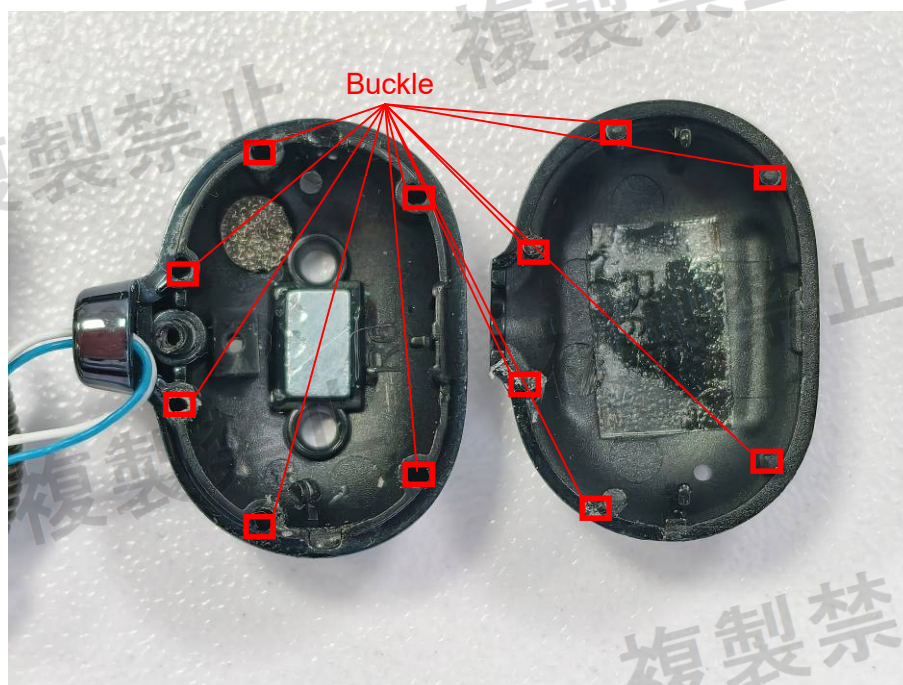
2.7 EQUIPMENTS LIST FOR ALL TEST ITEMS

Equipment	Manufacturer	Model	Serial No.	Calibration Date	Calibration Due
Spectrum analyzer	Keysight	N9020A	MY54101721	2025/10/23	2026/10/22
Power Meter	R&S	NRVS	100696	2025/10/23	2026/10/22
DC Power Supply	LongWei(HK)	LW6010KD	011089883	2025/10/23	2026/10/22
Calibration by the calibration agencies listed in the table correspond to paragraph 4 (i) (c) of Article 24-2 in the Radio Law". Guangzhou Lisai Metrology & Test co.,Ltd.					
The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).					

3. RF SHIELDING METHOD

Enclosure:

RF section, ROM, LO crystal covered with Special structure, It does not open easily.
See below the structure:



4. TEST RESULT FOR BLUETOOTH

4.1 FREQUENCY ERROR

4.2 LIMIT

Item	Limits
Frequency Error	±50ppm

4.3 MEASURING INSTRUMENTS AND SETTING

The following table is the setting of Spectrum Analyzer.

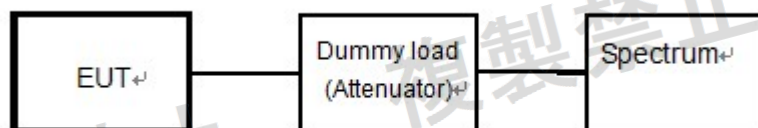
Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	10KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.4 TEST PROCEDURES

- (1) In the case of unmodulated signal (continuous or continuous burst), measure the frequency directly by a frequency meter.
- (2) In the case of burst waves, the measurement shall be done for enough time in order to obtain the enough measuring accuracy, and the average of the measured values becomes the final value.
- (3) In the case of a test mode with a specific frequency spectrum, measure the frequency of the specific spectrum by a spectrum analyzer.
- (4) In the cases above, if the frequency equivalent to the test frequency is not directly measured in principle, it shall be obtained by necessary calculation.

In the case of modulated signal, if there is no specific spectrum measurable by a spectrum analyzer but a specific dip is observed, it is allowed to measure the frequency with the signal generator (synthesized). That is, observe a signal of the signal generator concurrently (or alternately) with the tested signal using the spectrum analyzer while setting the frequency of the signal generator to the position of the dip on the screen of the spectrum analyzer, and determine the frequency of the signal generator at the time as a measured value.

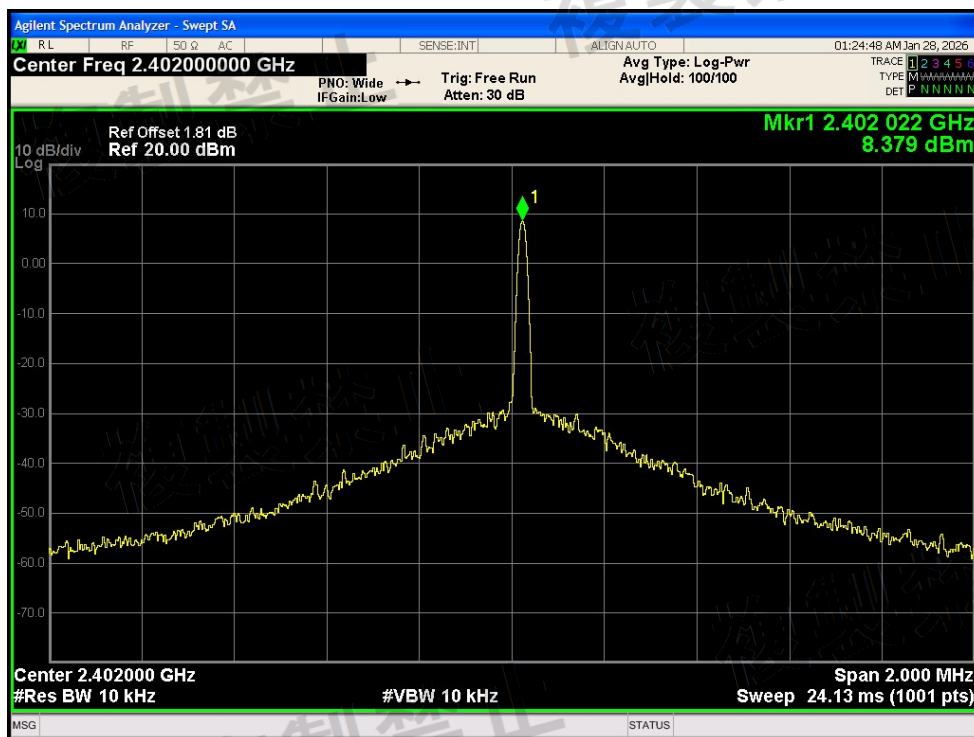
4.5 TEST SETUP LAYOUT

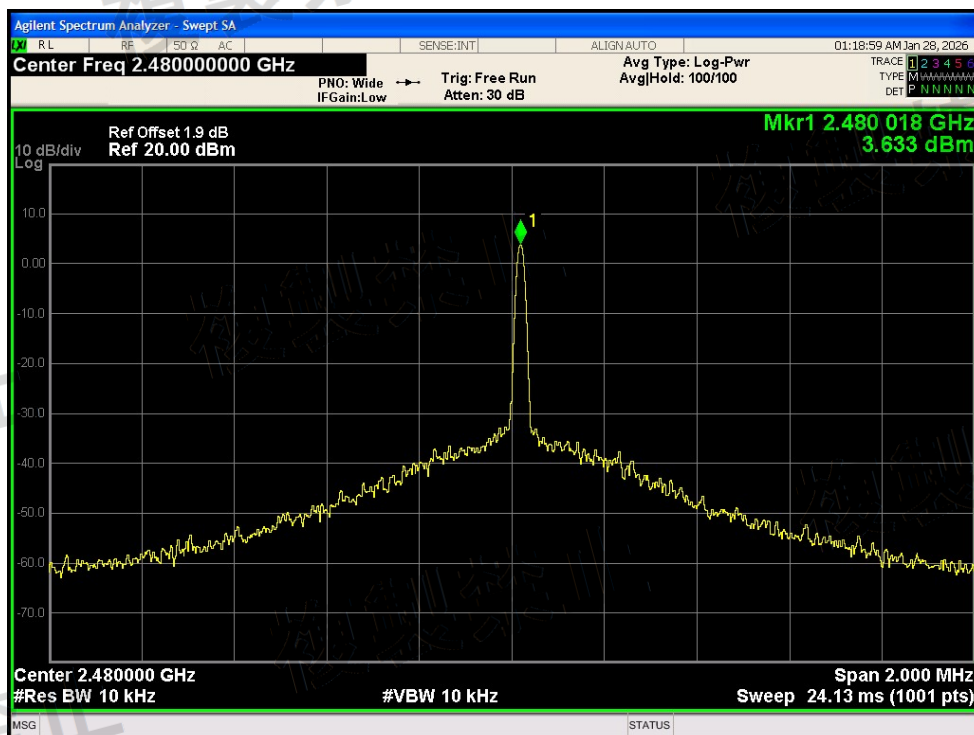
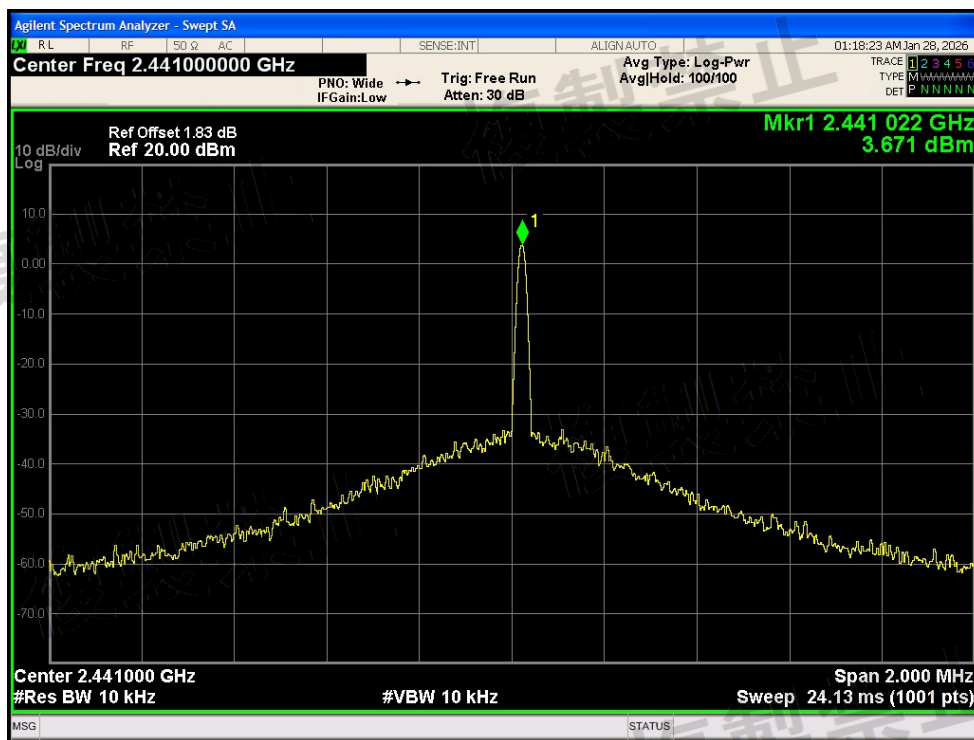


4.5.1 TEST RESULT

Operation Mode:	Transmitting-Un-modulation mode
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Voltage	Frequency	Reading	Tolerance	Limit
Normal Voltage	MHz	MHz	ppm	(ppm)
	2402	2402.022	9.16	±50
	2441	2441.022	9.01	±50
	2480	2480.018	7.26	±50





5. ANTENNA POWER

5.1 LIMIT

Item	Limits
Antenna Power Density	$\leq 3\text{mW/MHz}$ (FH form 2427 - 2470.75 MHz) $\leq 10\text{mW/MHz}$ (OFDM,DS from 2400~2483.5MHz) $\leq 10\text{mW}$ (Other from 2400~2483.5MHz)
Antenna Power Error	+20%, -80% (Base on manufacturer declare antenna power density)

5.2 MEASURING INSTRUMENTS AND SETTING

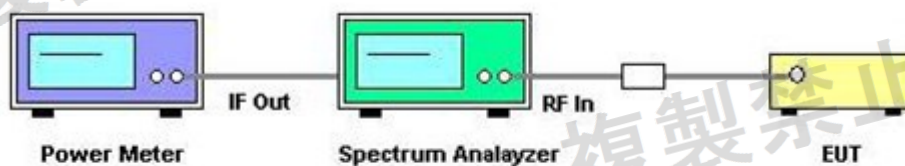
Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.3 TEST PROCEDURES

1. A power meter is connected on the IF output port of the spectrum analyzer.
2. Adjust the spectrum analyzer to have the center frequency the same with the measured carrier. RBW=VBW=1MHz, detector mode is positive peak. Turn off the averaging function and use zero span.
3. The calibrating signal power shall be reduced to 0 dBm and it shall be verified that the power meter reading also reduces by 10 dB.
4. Connect the equipment to be measured. Using the following settings of the spectrum analyzer in combination with "max hold" function, find the frequency of highest power output in the power envelope: center frequency equal to operating frequency; RBW & VBW: 1 MHz; detector mode: positive peak; averaging: off; span: 3 times the spectrum width; amplitude: adjust for middle of the instrument' range. The frequency found shall be recorded.
5. Set the center frequency of the spectrum analyzer to the found frequency and switch to zero span. The power meter indicates the measured power density "E".
6. Calculate antenna power density by the formula below $PD = Pt + 10 \cdot \log(1/x)$.
x: The duty cycle of the EUT in continuously transmitting mode
Pt: Output power of the SSG
7. Antenna Power Error is definition that actual measure antenna power tolerance between + 20% to - 80% power range that base on manufacturer declare the conducted power density.

5.4 TEST SETUP LAYOUT



5.5 TEST DEVIATION

There is no deviation with the original standard.

5.6 TEST RESULT

TEST CONDITION	Conducted RF output power (dBm)	Conducted RF output Power (mW)	Spread bandwidth (MHz)	Antenna Power (mW/MHz)	Rated output power (mW/MHz)	Tolerance (%)
GFSK	11.12	12.942	71.074	0.182	0.2	-9.00
$\pi/4$ -DQPSK	11.14	13.002	71.222	0.183	0.2	-8.50
8DPSK	11.13	12.972	71.249	0.182	0.2	-9.00

6. OCCUPIED BANDWIDTH

6.1 LIMIT

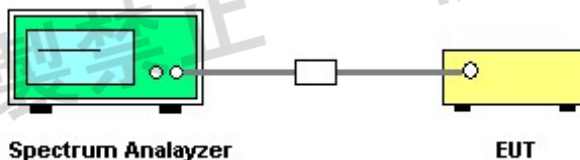
Item	Limits
Occupied Band Width:	FH 83.5MHz; OFDM,DS ≤ 26 MHz; Others ≤ 26 MHz
Spreading Bandwidth:	≥ 500 kHz (FH, DS)

6.1.2. MEASURING INSTRUMENTS AND SETTING

6.1.3. TEST PROCEDURES

- Setting of SA is following as: RB: 1MHz / VB:1MHz / SPAN: 120MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
- EUT have transmitted the maximum modulation signal and fixed channelize (For DSSS or OFDM Device) or continuous maximum power of hopping mode(For FHSS Device). SA set to 99% of occupied bandwidth to measure occupied bandwidth. The limit is less than 26MHz(For DSSS or OFDM Device) or 83.5MHz(For FHSS Device).
- SA set to 90% of occupied bandwidth to measure Spread Spectrum Bandwidth and must greater than 500kHz.
- Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
- Spread Spectrum Factor limit is greater than 5

6.1.4. TEST SETUP LAYOUT



6.1.5. TEST DEVIATION

There is no deviation with the original standard.

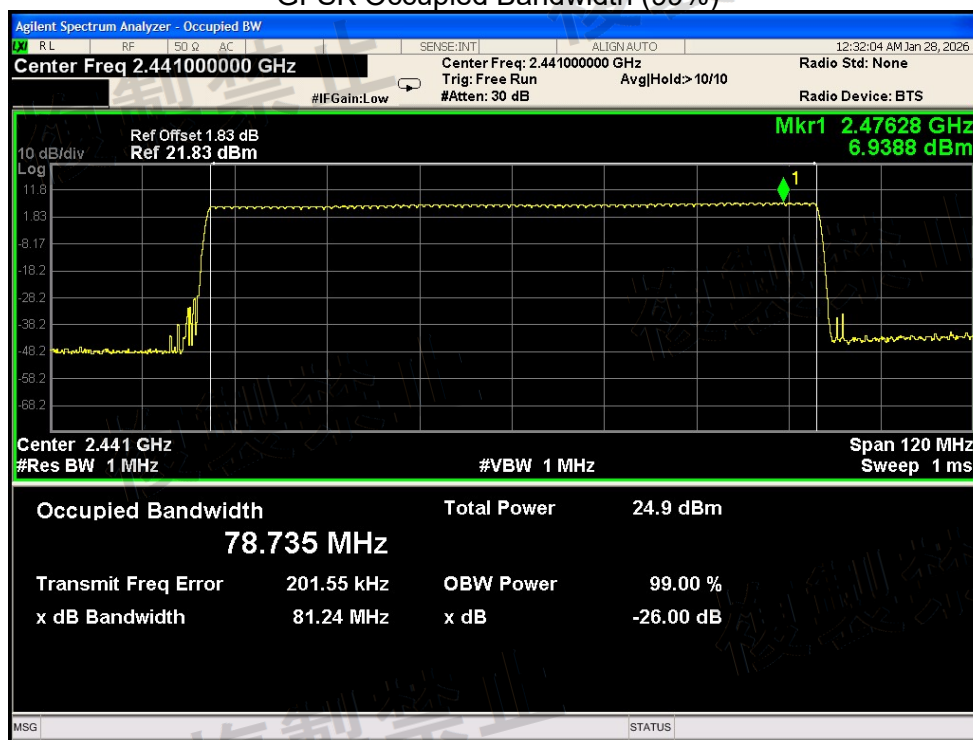
6.1.6. EUT OPERATION DURING TEST

The EUT was programmed to be in continuously transmitting mode.

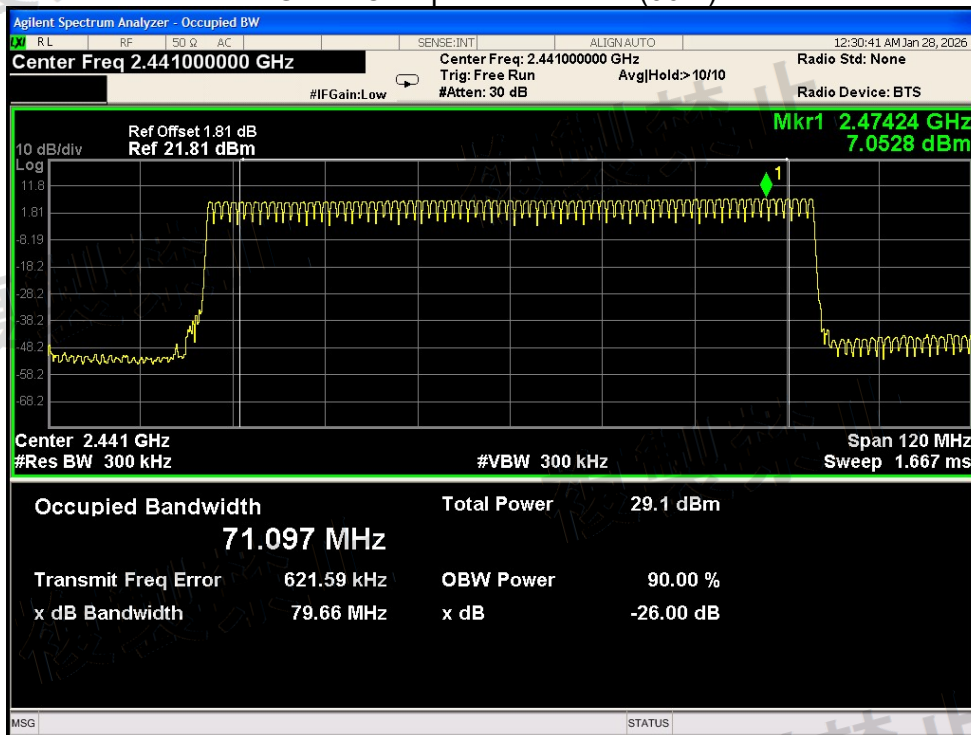
6.2 TEST RESULT

Test Voltage	TEST CONDITION	99%Hopping Mode(Occupied bandwidth) MHz	90%Hopping Mode(Occupied bandwidth) MHz
Normal Voltage	GFSK	78.735	71.097
	$\pi/4$ -DPSK	78.858	71.218
	8DPSK	78.846	71.249

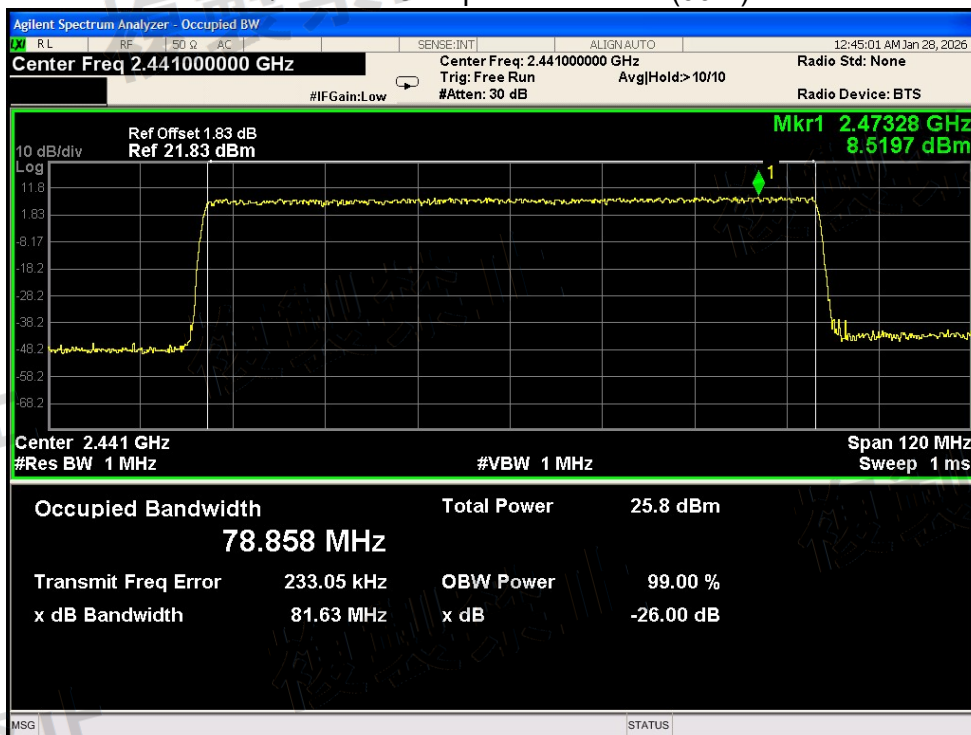
GFSK Occupied Bandwidth (99%)



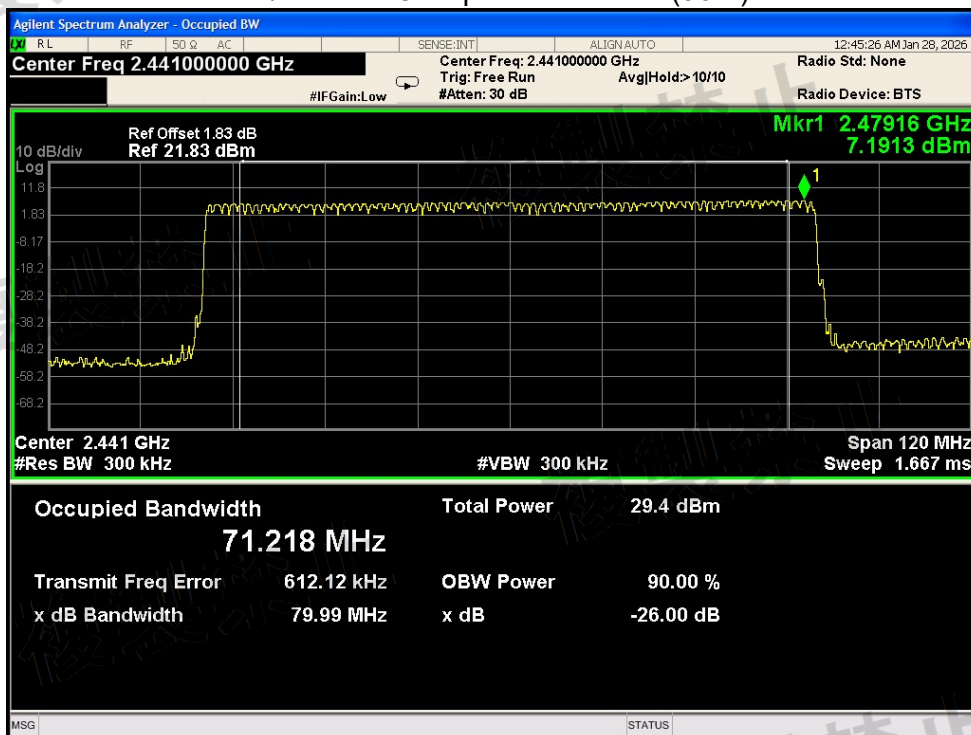
GFSK Occupied Bandwidth (90%)



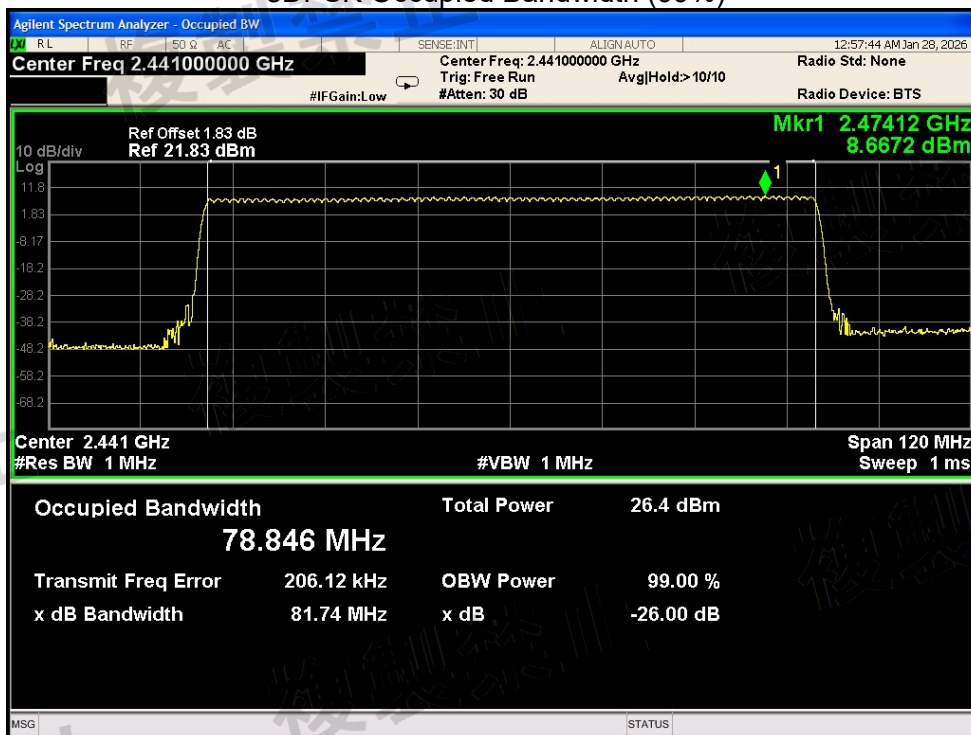
$\pi/4$ -DPSK Occupied Bandwidth (99%)



$\pi/4$ -DPSK Occupied Bandwidth (90%)

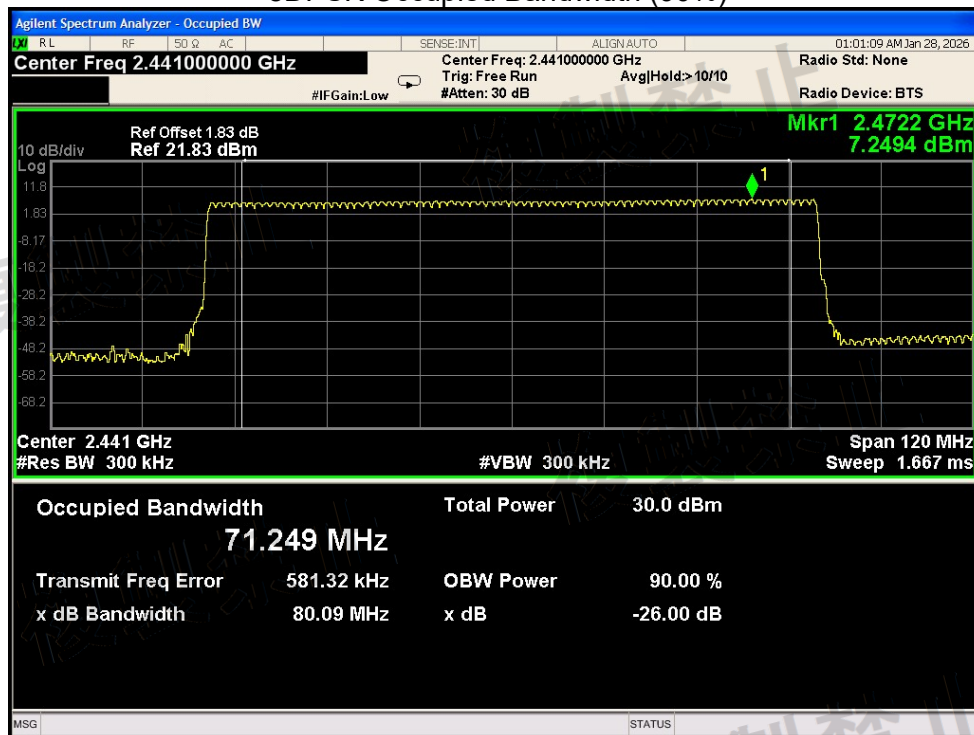


8DPSK Occupied Bandwidth (99%)





8DPSK Occupied Bandwidth (90%)



7. UNWANTED EMISSION INTENSITY MEASUREMENT

7.1 LIMIT

Item	Limits
TX Spurious Emission	$\leq 2.5 \mu\text{W/MHz}$ ($30\text{MHz} \leq f \leq 1000\text{MHz}$)
	$\leq 2.5 \mu\text{W/MHz}$ ($1000\text{MHz} < f \leq 2387\text{MHz}$)
	$\leq 25 \mu\text{W/MHz}$ ($2387\text{MHz} < f \leq 2400\text{MHz}$)
	$\leq 25 \mu\text{W/MHz}$ ($2483.5\text{MHz} \leq f < 2496.5\text{MHz}$)
	$\leq 2.5 \mu\text{W/MHz}$ ($2496.5\text{MHz} \leq f < 12500\text{MHz}$)

7.2. MEASURING INSTRUMENTS AND SETTING

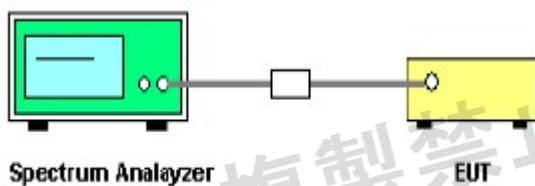
Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB / VB	1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

7.3. TEST PROCEDURES

- EUT have transmitted the maximum modulation signal and fixed channelize.
- Setting of SA is following as: Below 1GHz RB:100KHz / VB:100KHz
Above 1GHz RB:1MHz / VB:1MHz / AT: 10dB Ref: 0dBm / Sweep time: Auto
Sweep Mode: Continuous sweep / Detect mode: Positive peak
Trace mode: Max hold
- Setting of SA is following as 30MHz and stop frequency 1000MHz Then to mark peak reading value + cable loss shall be less than 0.25 μW .
- Setting of SA is following as 1000MHz and stop frequency 2387MHz Then to mark peak reading value + cable loss shall be less than 2.5 μW .
- SA adjusted to start frequency 2387MHz and stop frequency 2400MHz. Then to mark peak reading value + cable loss shall be less than 25 μW .
- SA adjusted to start frequency 2483.5MHz and stop frequency 2496.5MHz Then to mark peak reading value + cable loss shall be less than 25 μW
- SA adjusted to start frequency 2496.5MHz and stop frequency 12500MHz Then to mark peak reading value + cable loss shall be less than 2.5 μW
- Measure side band spurious as follows: For 2.4GHz band: 2374MHz~2400MHz and 2483.5MHz~2509.5MHz RBW = VBW = 30kHz, Result_Value = Measured_Value + 15.2 [dBm]
- If the Result_Value is over the requirement, take total sum of 1MHz band centered at the spur frequency like ACLP measurement as Result_Value.

7.4. TEST SETUP LAYOUT



7.5. TEST DEVIATION

There is no deviation with the original standard.

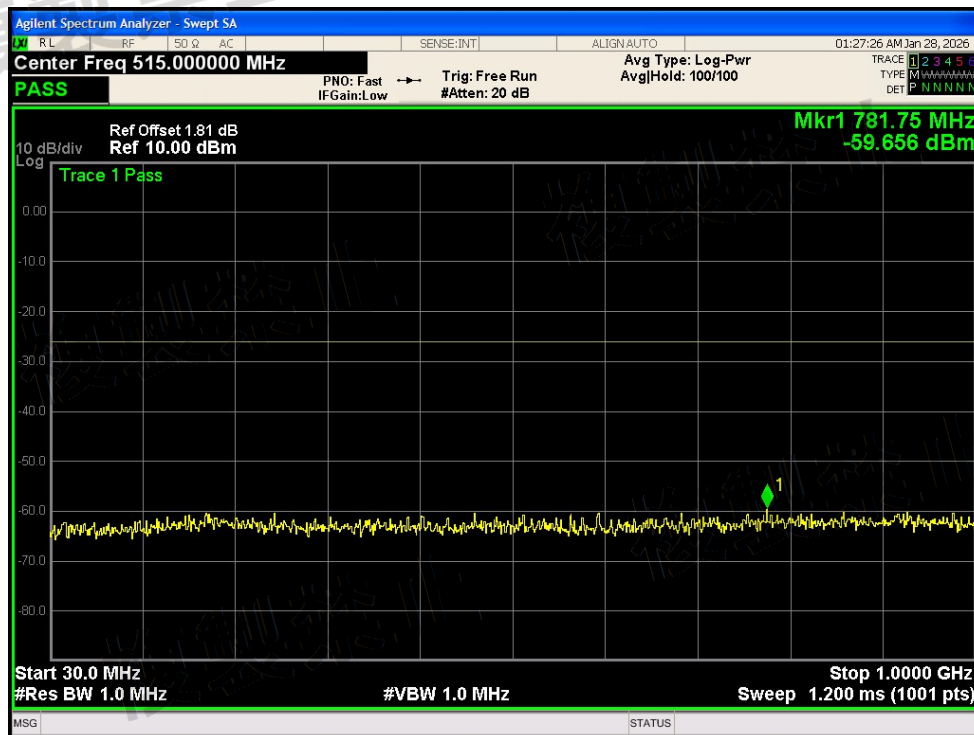


7.6. TEST RESULT

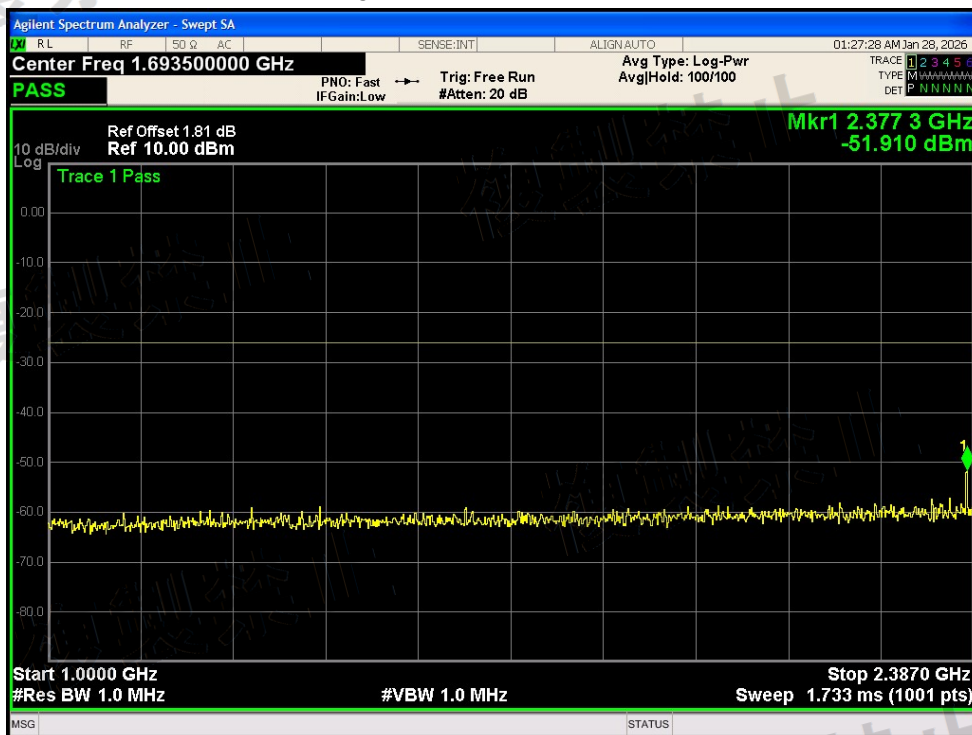
Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm/MHz)	Limit Start(dBm/MHz)	Limit Stop (dBm/MHz)	Verdict
1-DH1	2402	30-1000	781.75	-59.65	-26	-26	Pass
1-DH1	2402	1000-2387	2377.29	-51.90	-26	-26	Pass
1-DH1	2402	2387-2400	2400.00	-29.73	-16	-16	Pass
1-DH1	2402	2483.5-2496.5	2492.67	-56.44	-16	-16	Pass
1-DH1	2402	2496.5-13000	4807.27	-26.80	-26	-26	Pass
1-DH1	2441	30-1000	784.66	-59.45	-26	-26	Pass
1-DH1	2441	1000-2387	2364.81	-57.77	-26	-26	Pass
1-DH1	2441	2387-2400	2388.43	-55.35	-16	-16	Pass
1-DH1	2441	2483.5-2496.5	2493.34	-55.27	-16	-16	Pass
1-DH1	2441	2496.5-13000	4880.79	-28.87	-26	-26	Pass
1-DH1	2480	30-1000	576.11	-58.09	-26	-26	Pass
1-DH1	2480	1000-2387	1957.03	-57.67	-26	-26	Pass
1-DH1	2480	2387-2400	2396.67	-57.57	-16	-16	Pass
1-DH1	2480	2483.5-2496.5	2483.51	-33.55	-16	-16	Pass
1-DH1	2480	2496.5-13000	4964.82	-29.32	-26	-26	Pass
2-DH1	2402	30-1000	935.98	-59.22	-26	-26	Pass
2-DH1	2402	1000-2387	2377.29	-51.44	-26	-26	Pass
2-DH1	2402	2387-2400	2400.00	-27.85	-16	-16	Pass
2-DH1	2402	2483.5-2496.5	2489.67	-56.17	-16	-16	Pass
2-DH1	2402	2496.5-13000	4807.27	-28.16	-26	-26	Pass
2-DH1	2441	30-1000	964.11	-59.54	-26	-26	Pass
2-DH1	2441	1000-2387	2338.46	-56.42	-26	-26	Pass
2-DH1	2441	2387-2400	2389.13	-55.08	-16	-16	Pass
2-DH1	2441	2483.5-2496.5	2493.17	-54.50	-16	-16	Pass
2-DH1	2441	2496.5-13000	4880.79	-28.40	-26	-26	Pass
2-DH1	2480	30-1000	955.38	-59.15	-26	-26	Pass
2-DH1	2480	1000-2387	2178.95	-57.45	-26	-26	Pass
2-DH1	2480	2387-2400	2392.07	-57.80	-16	-16	Pass
2-DH1	2480	2483.5-2496.5	2483.50	-33.69	-16	-16	Pass
2-DH1	2480	2496.5-13000	4964.82	-29.00	-26	-26	Pass
3-DH1	2402	30-1000	356.89	-59.85	-26	-26	Pass
3-DH1	2402	1000-2387	2377.29	-51.93	-26	-26	Pass
3-DH1	2402	2387-2400	2399.99	-27.35	-16	-16	Pass
3-DH1	2402	2483.5-2496.5	2485.18	-56.68	-16	-16	Pass
3-DH1	2402	2496.5-13000	4807.27	-44.44	-26	-26	Pass
3-DH1	2441	30-1000	39.70	-53.12	-26	-26	Pass
3-DH1	2441	1000-2387	2083.25	-55.99	-26	-26	Pass
3-DH1	2441	2387-2400	2393.19	-55.57	-16	-16	Pass
3-DH1	2441	2483.5-2496.5	2495.95	-54.39	-16	-16	Pass
3-DH1	2441	2496.5-13000	4880.79	-47.18	-26	-26	Pass
3-DH1	2480	30-1000	30.00	-52.16	-26	-26	Pass
3-DH1	2480	1000-2387	2330.13	-55.64	-26	-26	Pass
3-DH1	2480	2387-2400	2399.87	-54.99	-16	-16	Pass
3-DH1	2480	2483.5-2496.5	2488.56	-35.89	-16	-16	Pass
3-DH1	2480	2496.5-13000	2496.50	-41.61	-26	-26	Pass

EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	GFSK TX CH 00 ; Normal Voltage		

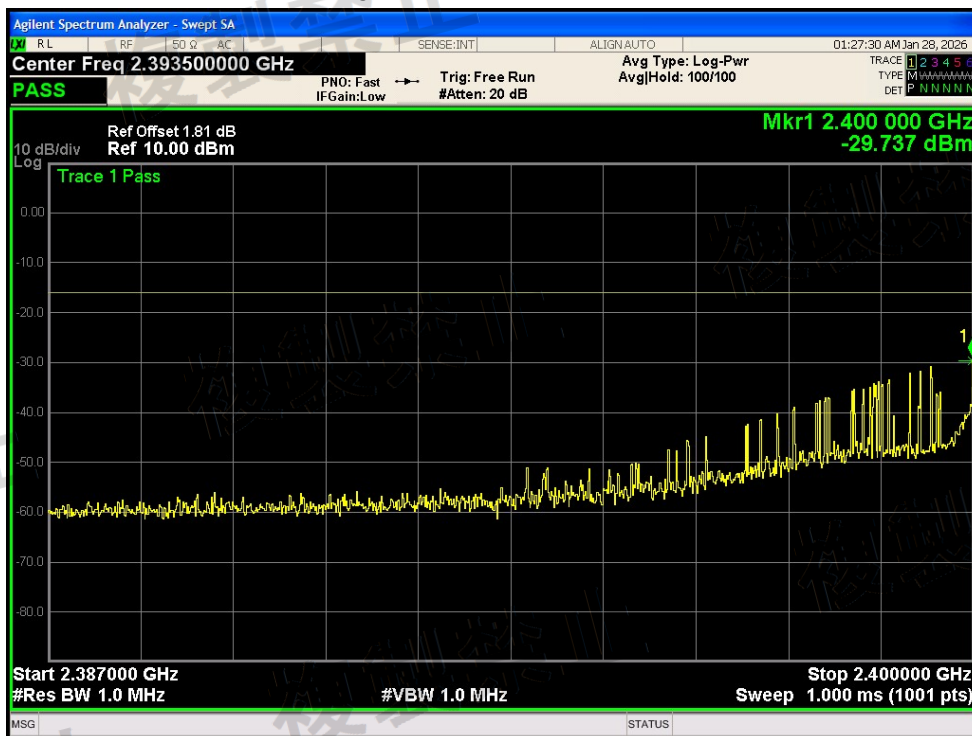
CH 00- Frequency Band 1 (30 MHz ≤ f ≤ 1000 MHz)



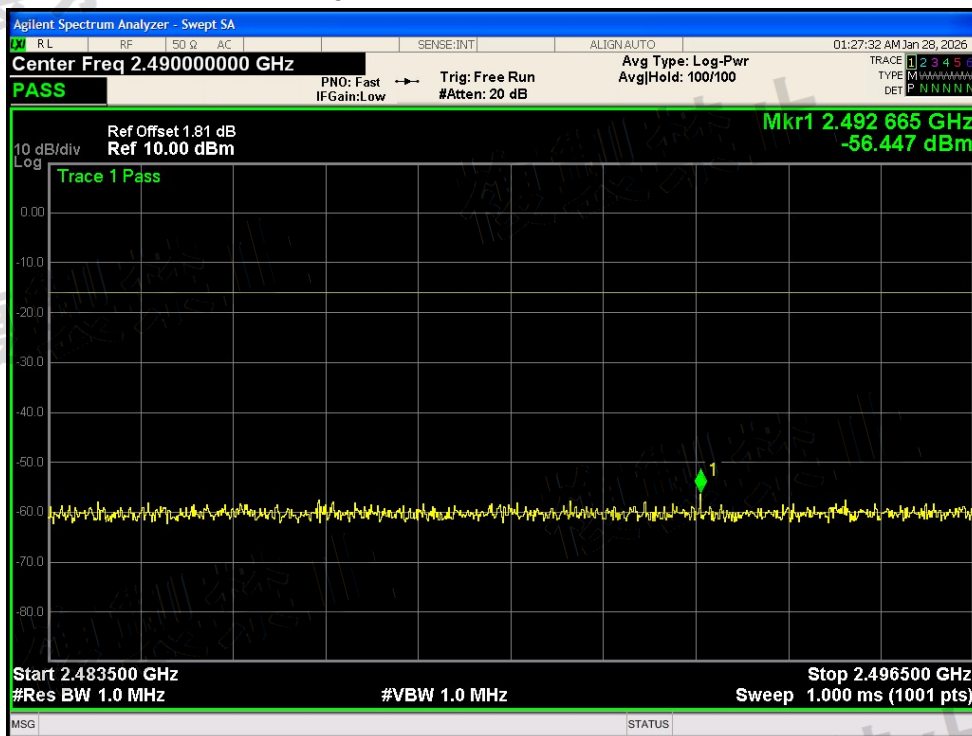
CH 00- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



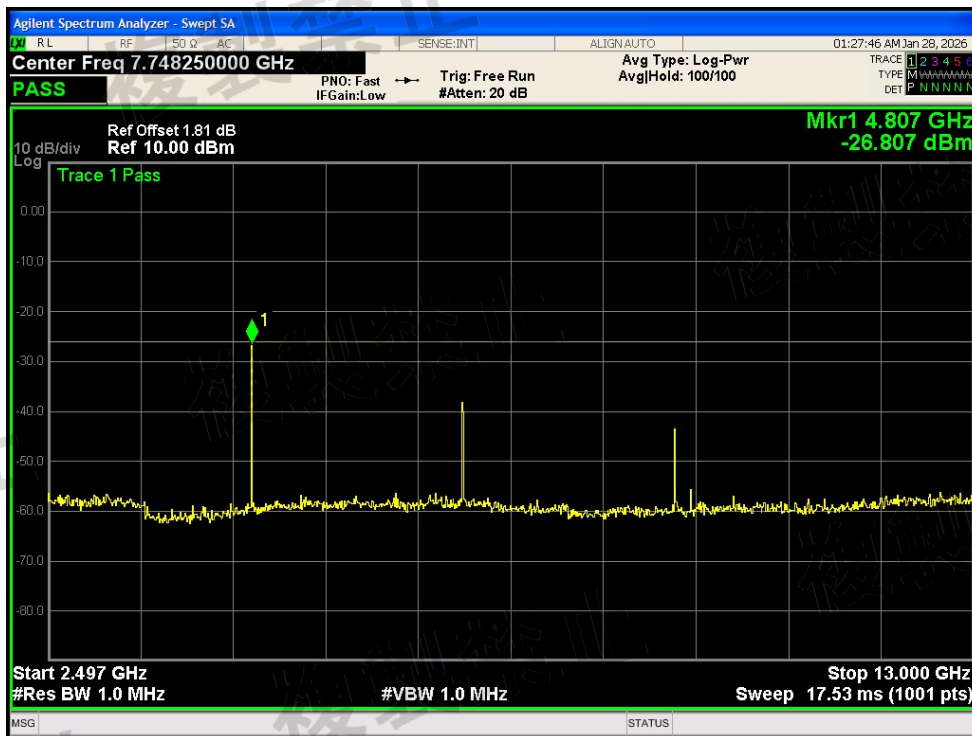
CH 00- Frequency Band 3 ($2387 \text{ MHz} < f \leq 2400 \text{ MHz}$)



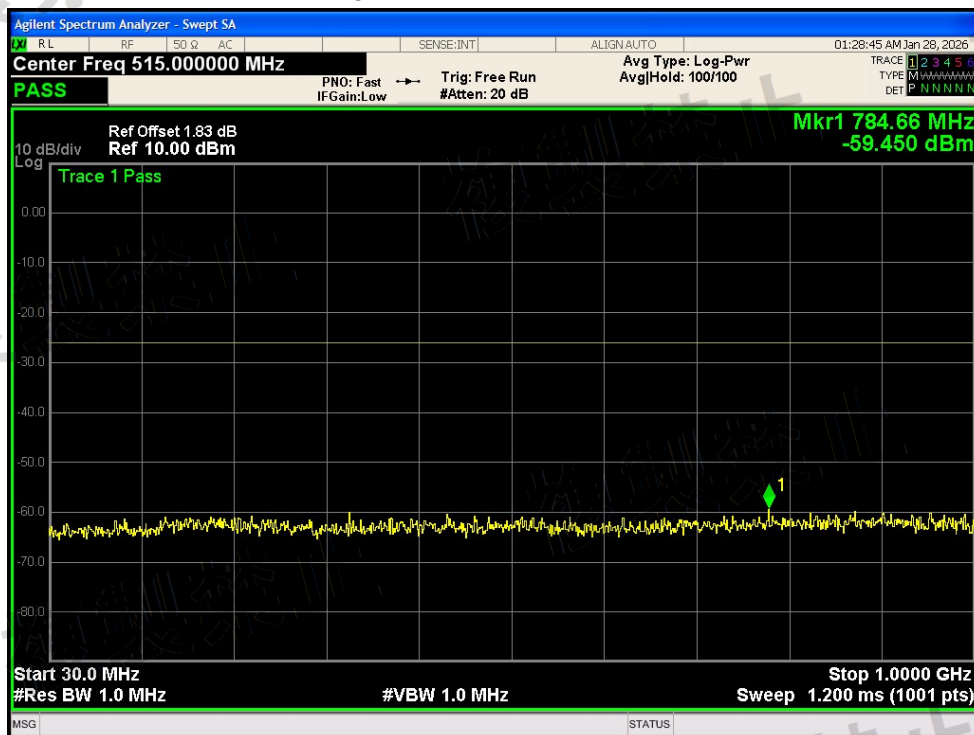
CH 00- Frequency Band 4 ($2483.5 \text{ MHz} \leq f < 2496.5 \text{ MHz}$)



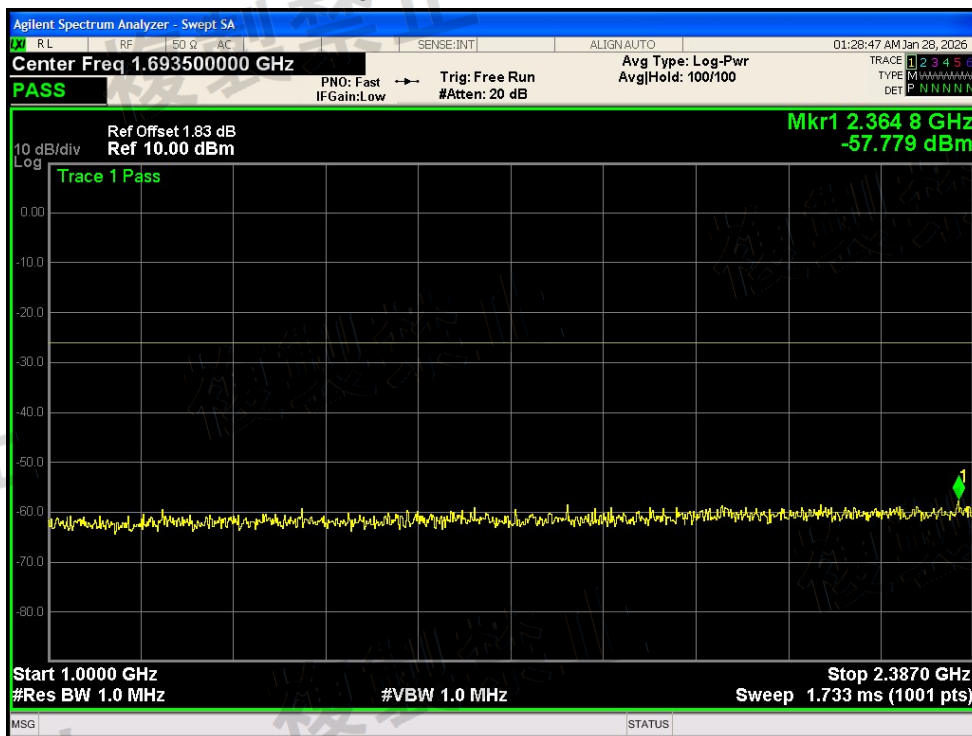
CH 00- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



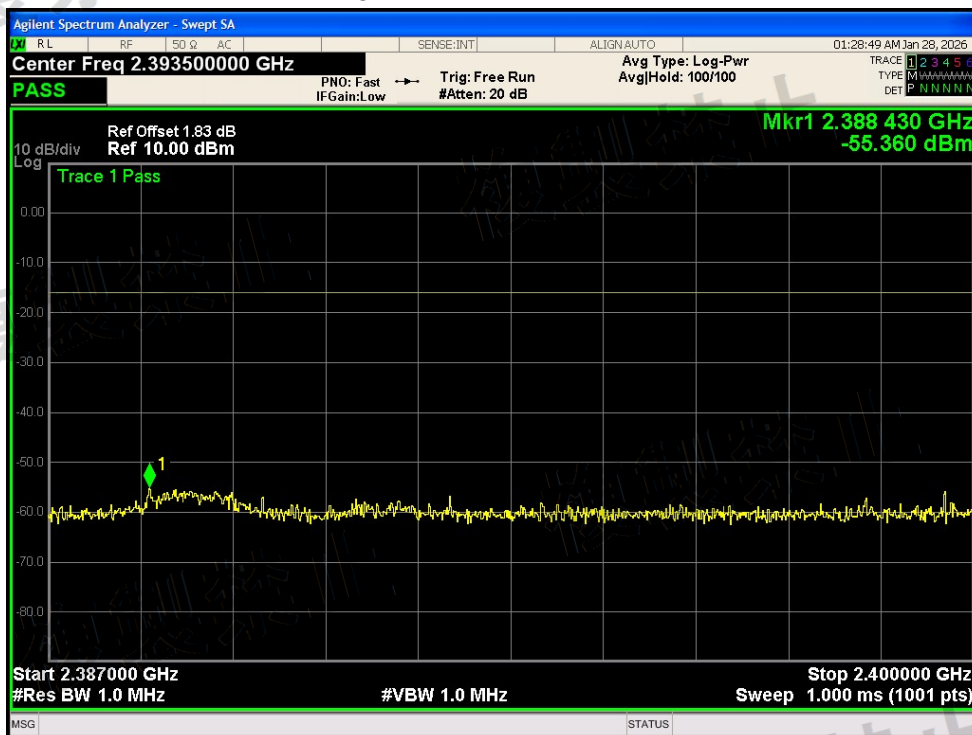
CH 39- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



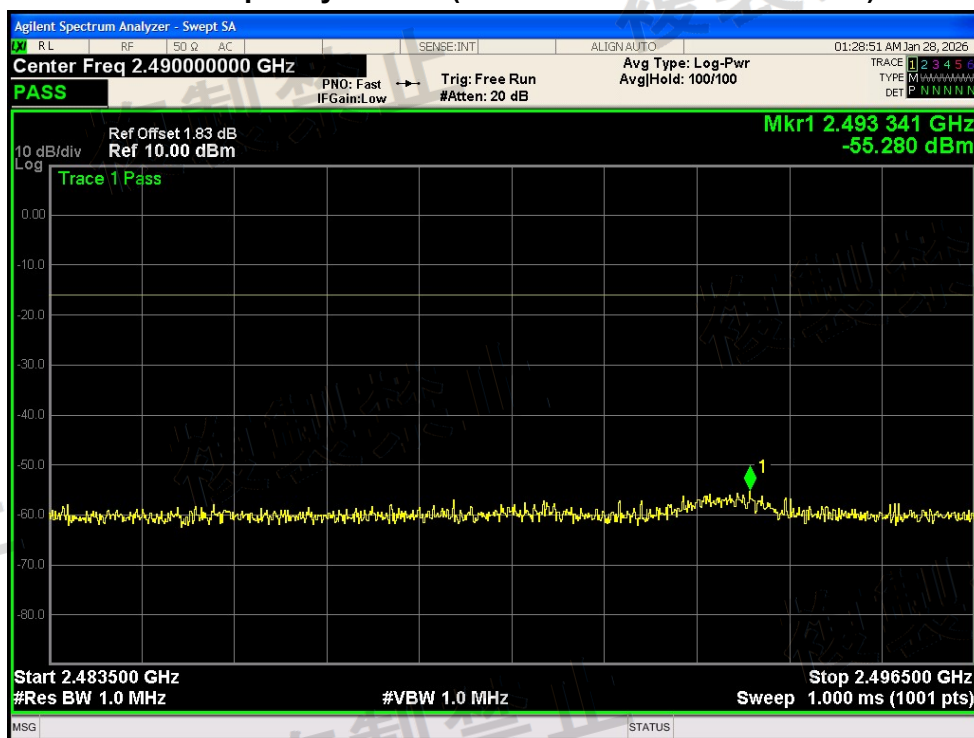
CH 39- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



CH 39- Frequency Band 3 ($2387 \text{ MHz} < f \leq 2400 \text{ MHz}$)

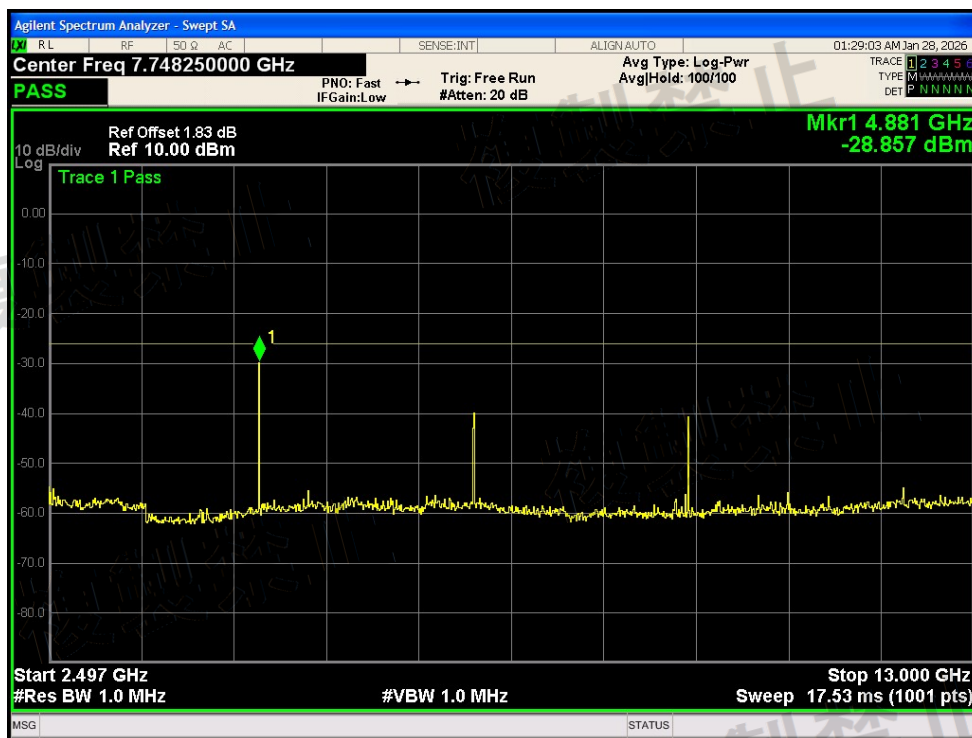


CH 39- Frequency Band 4 ($2483.5 \text{ MHz} \leq f < 2496.5 \text{ MHz}$)

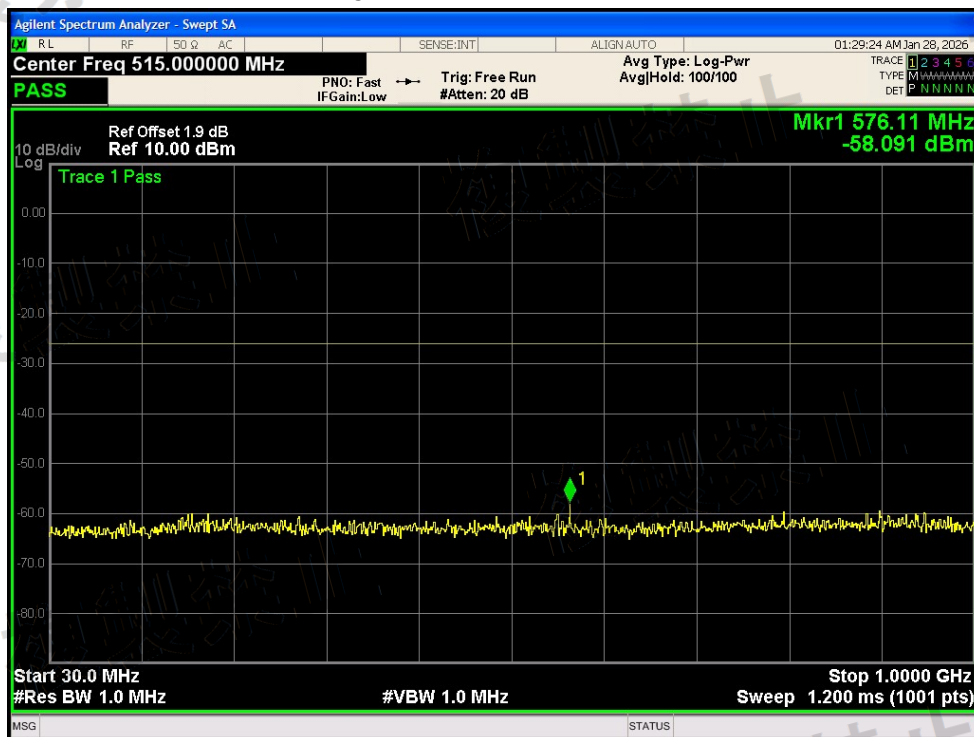




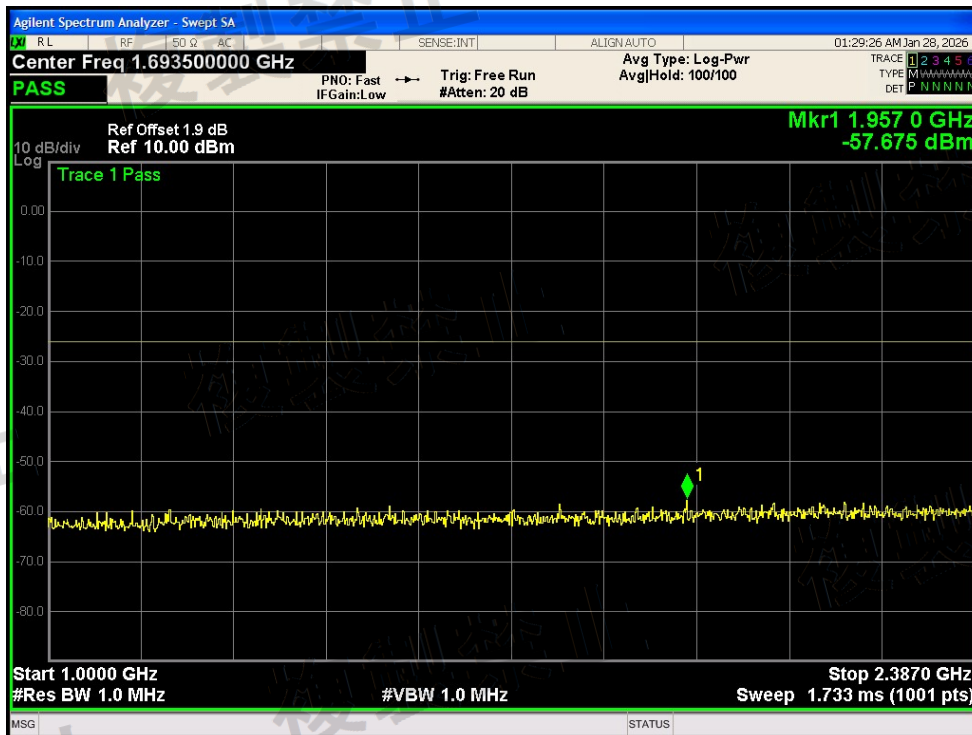
CH 39- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



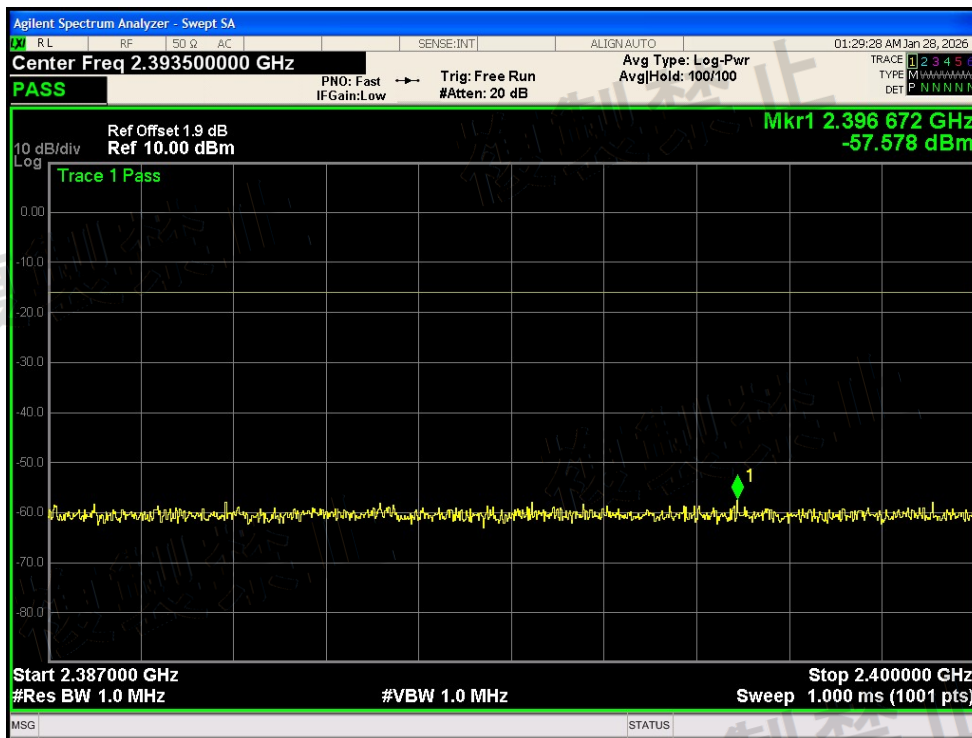
CH 78- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



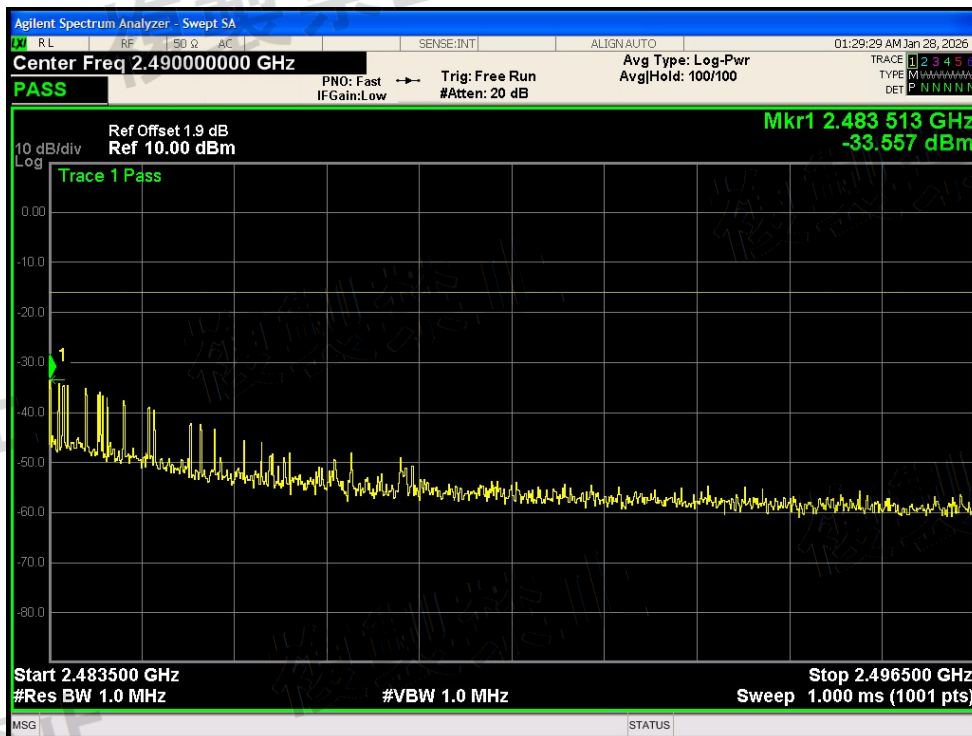
CH 78- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



CH 78- Frequency Band 3 (2387 MHz < f ≤ 2400 MHz)

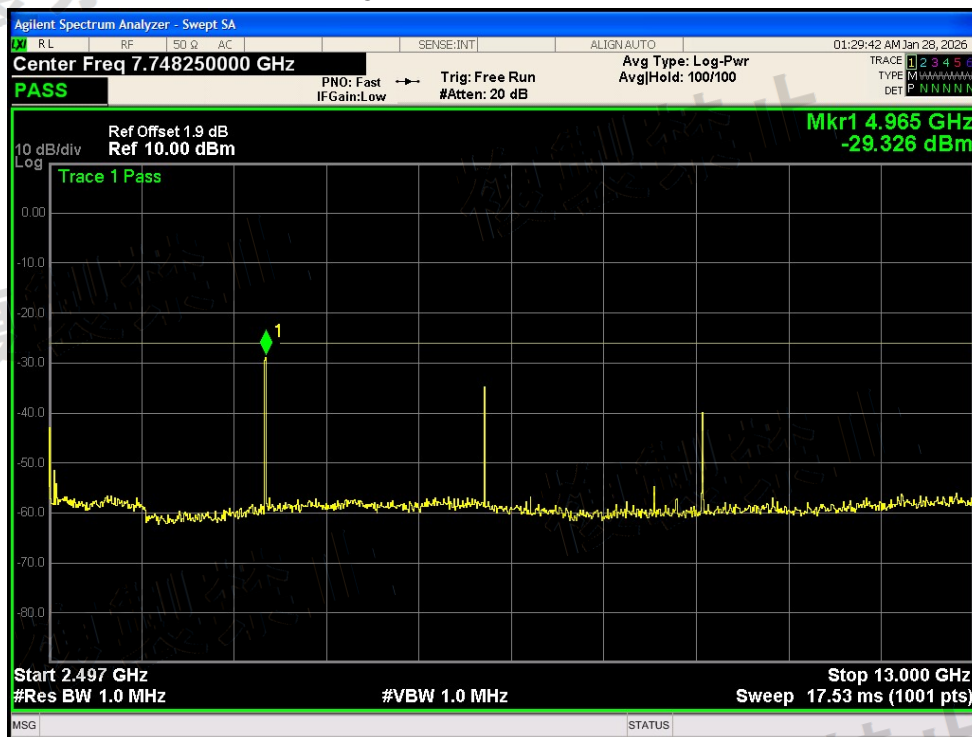


CH78- Frequency Band 4 (2483.5 MHz ≤ f < 2496.5 MHz)



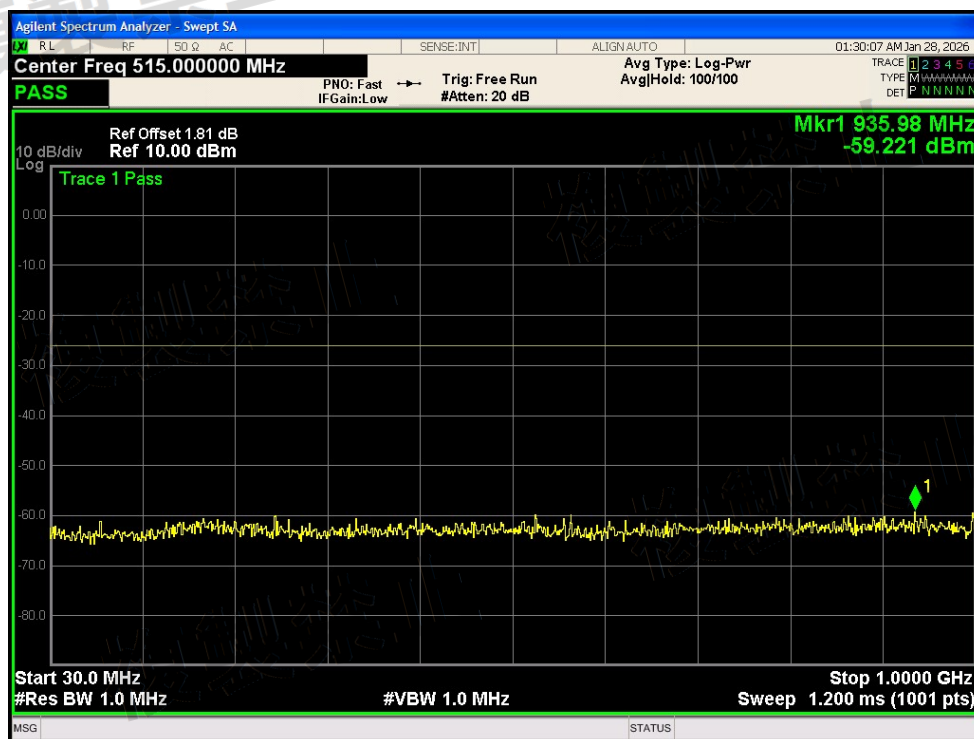
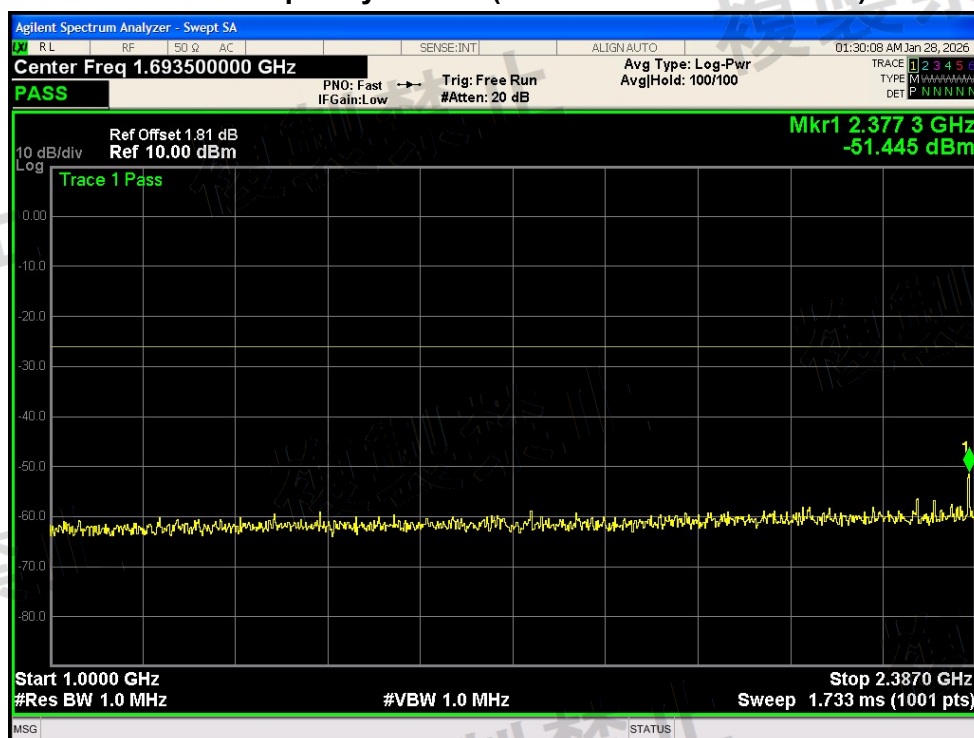


CH 78- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)

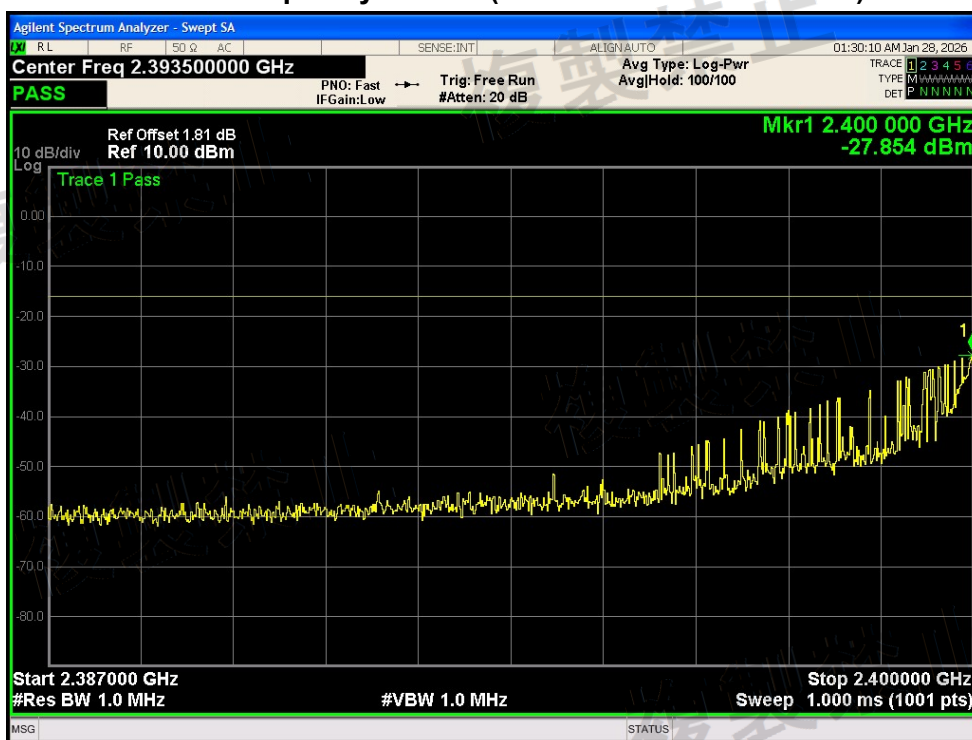




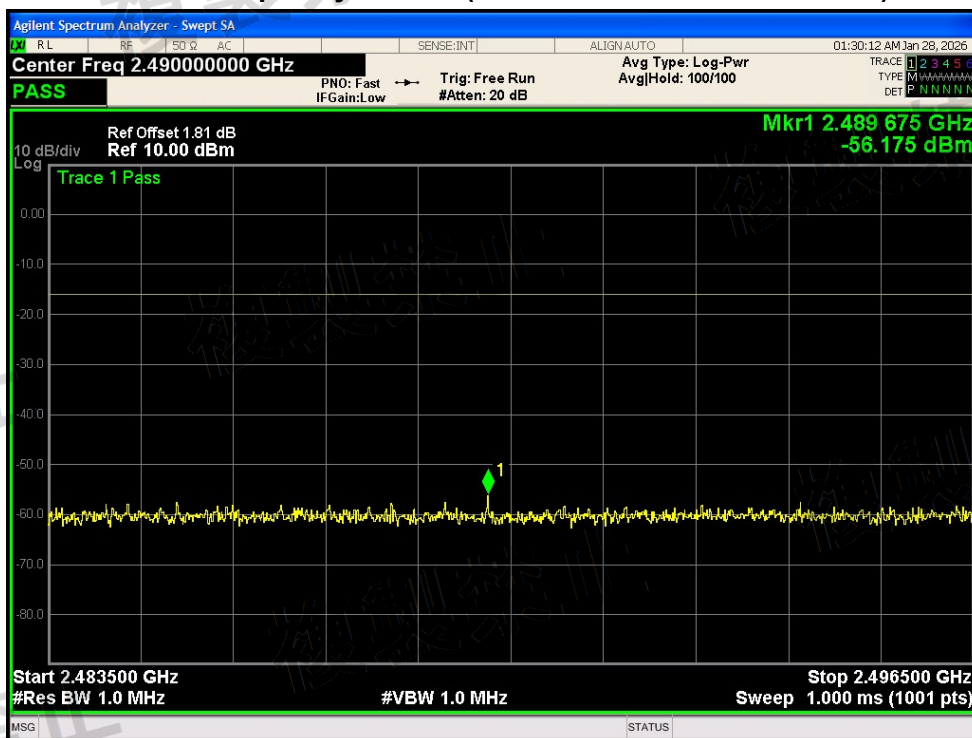
EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	π /4-DPSK TX CH 00 ; Normal Voltage		

CH 00- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)CH 00- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)

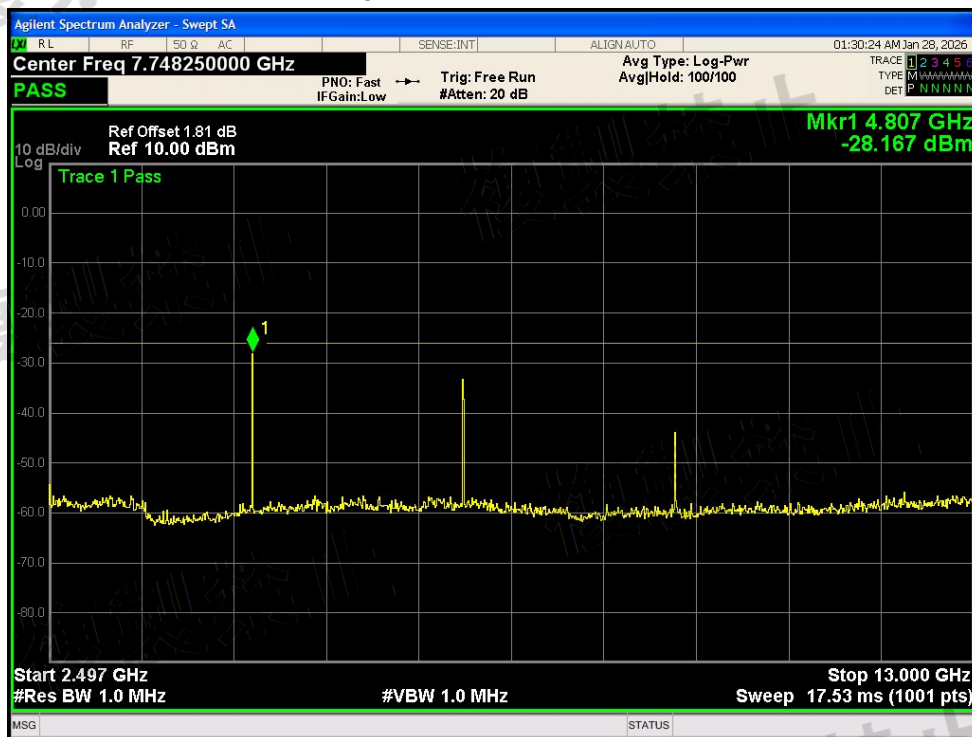
CH 00- Frequency Band 3 (2387 MHz < f ≤ 2400 MHz)



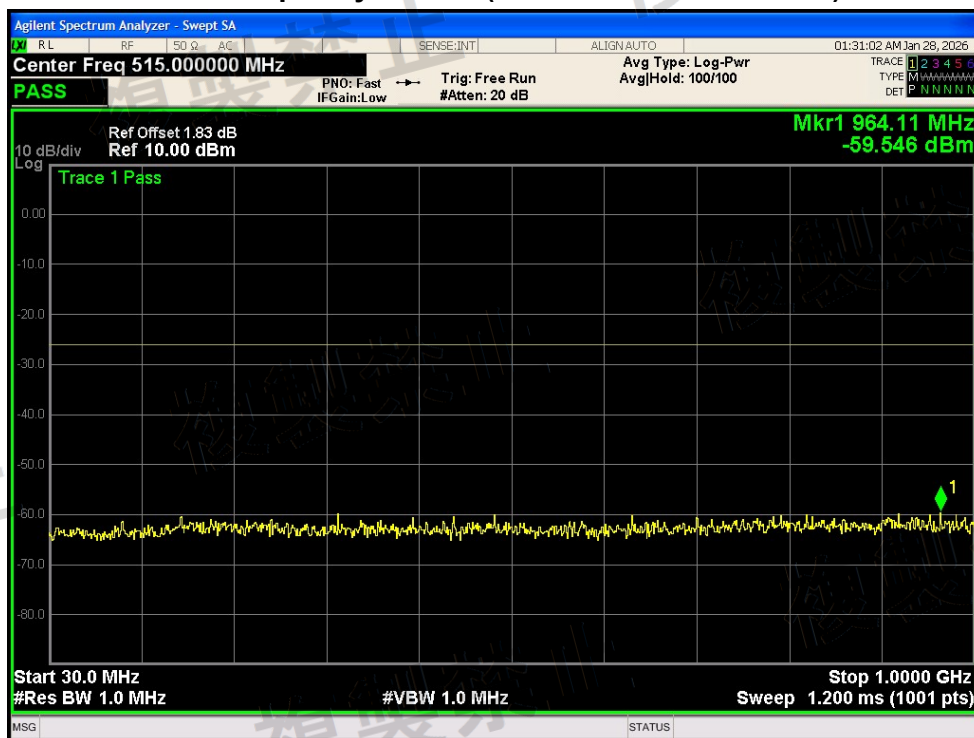
CH 00- Frequency Band 4 (2483.5 MHz ≤ f < 2496.5 MHz)



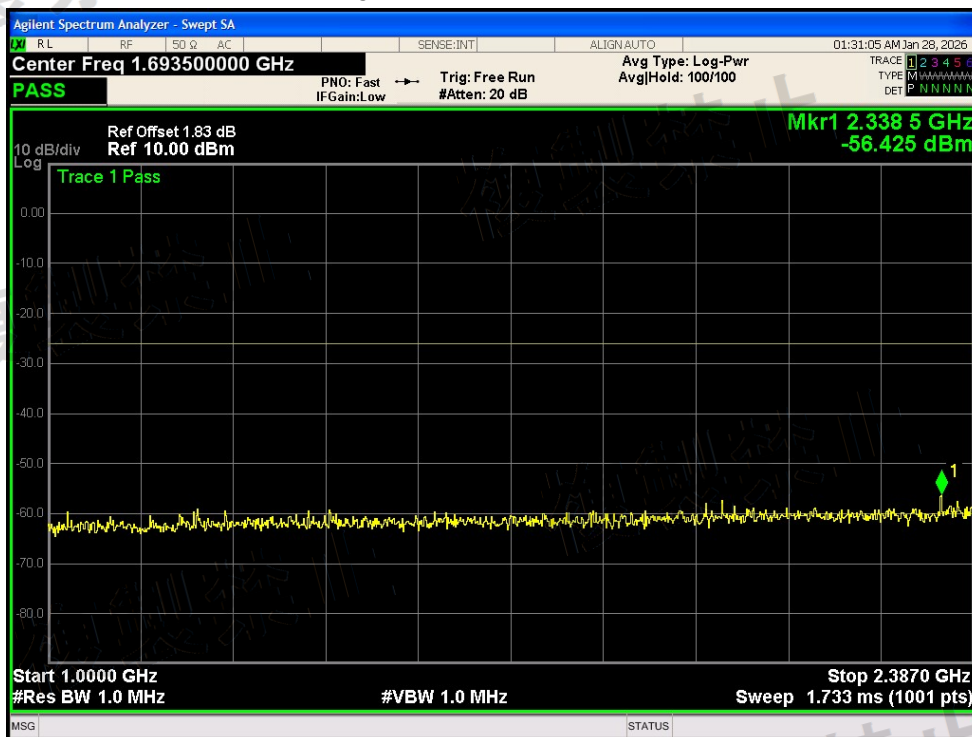
CH 00- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



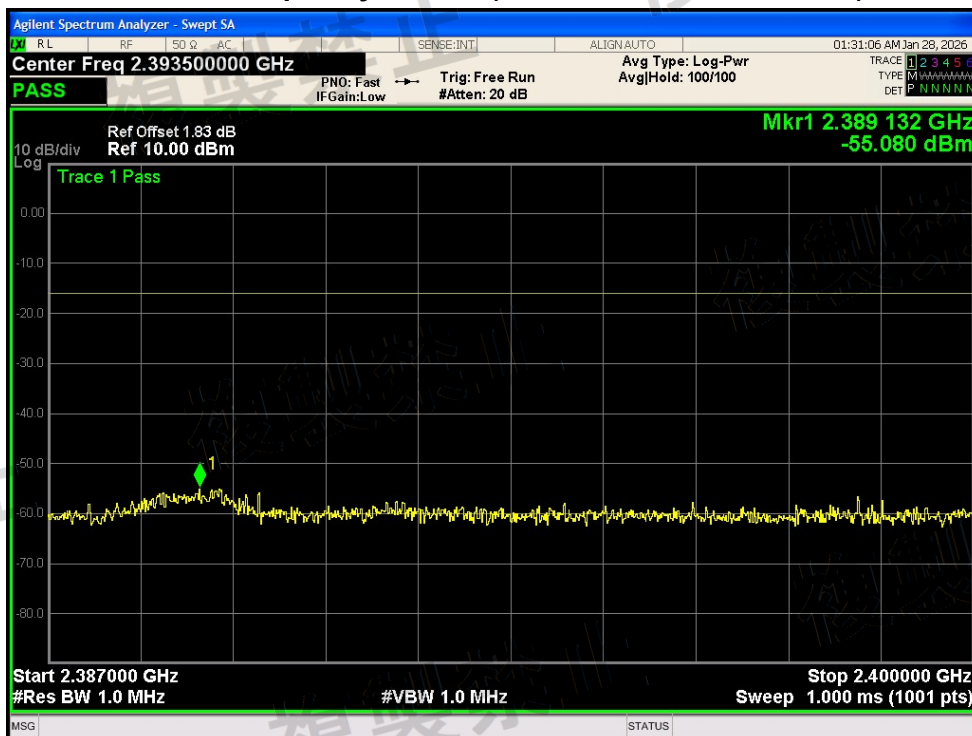
CH 39- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



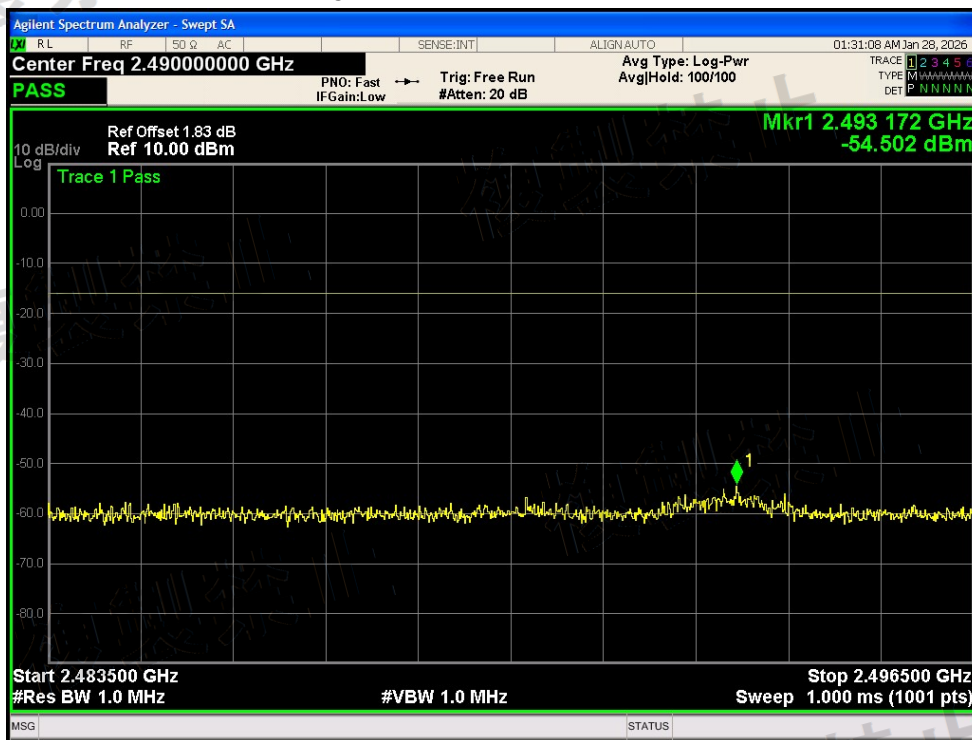
CH 39- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



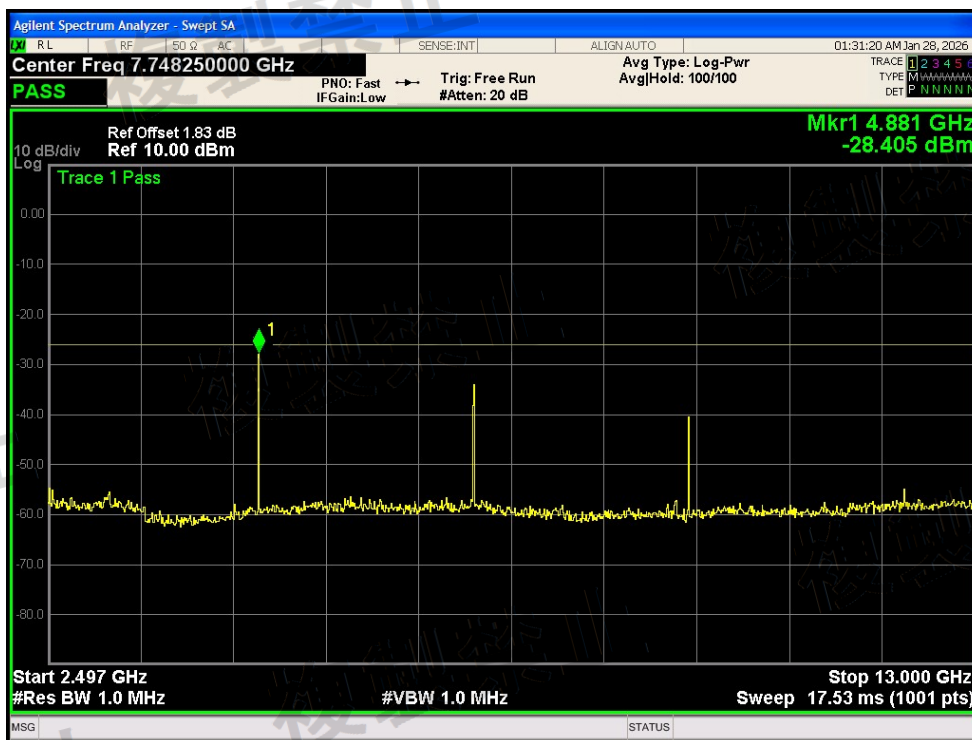
CH 39- Frequency Band 3 ($2387 \text{ MHz} < f \leq 2400 \text{ MHz}$)



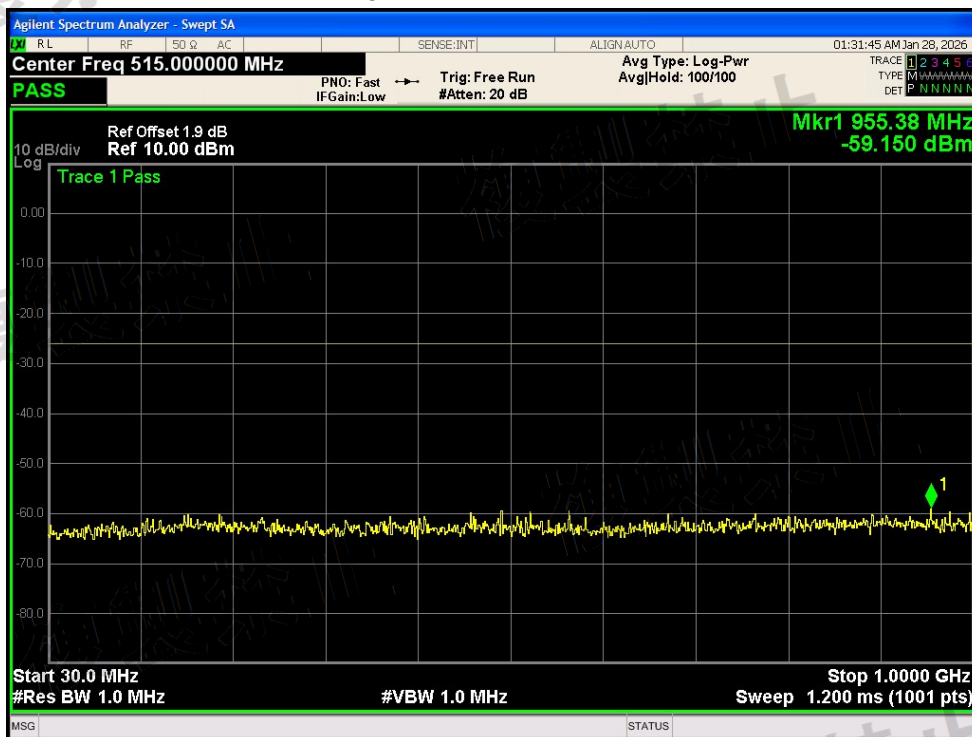
CH 39- Frequency Band 4 ($2483.5 \text{ MHz} \leq f < 2496.5 \text{ MHz}$)



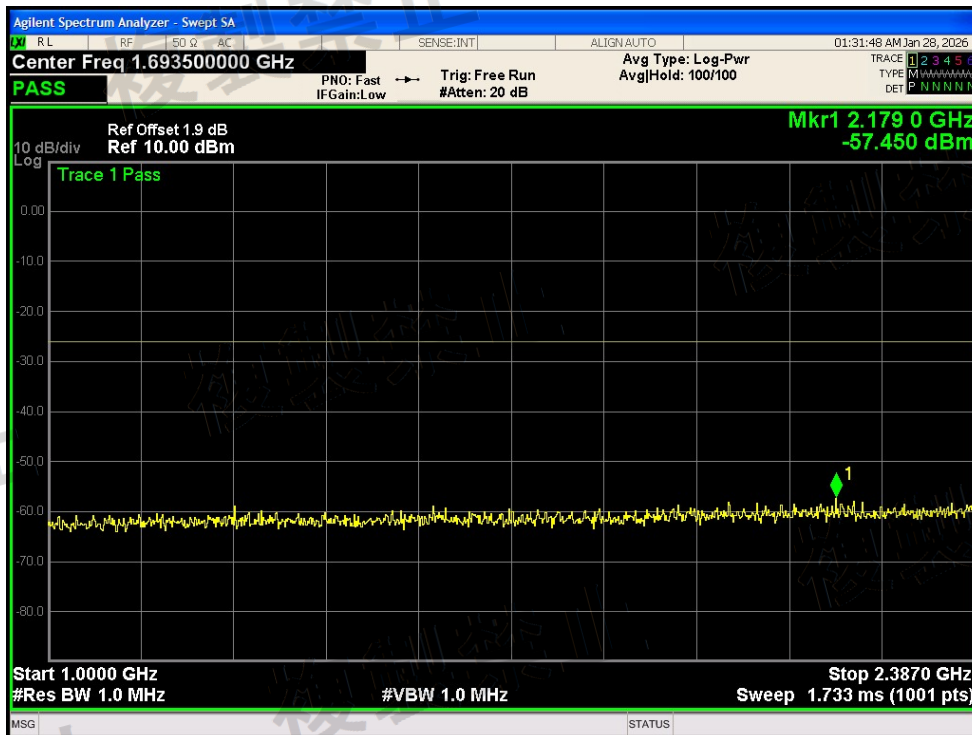
CH 39- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



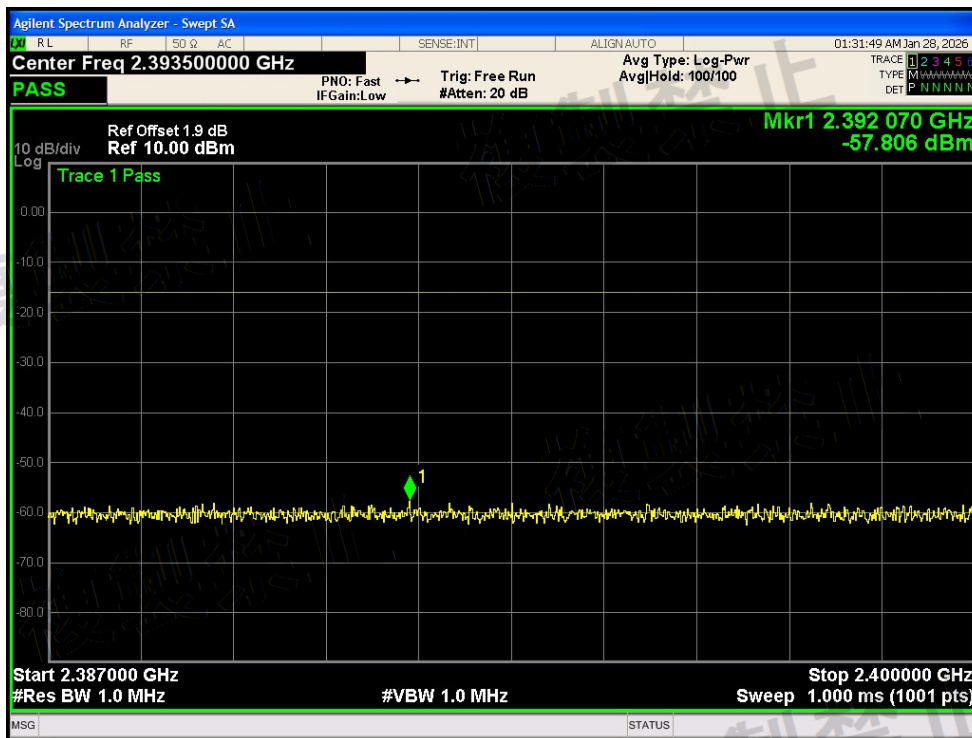
CH 78- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



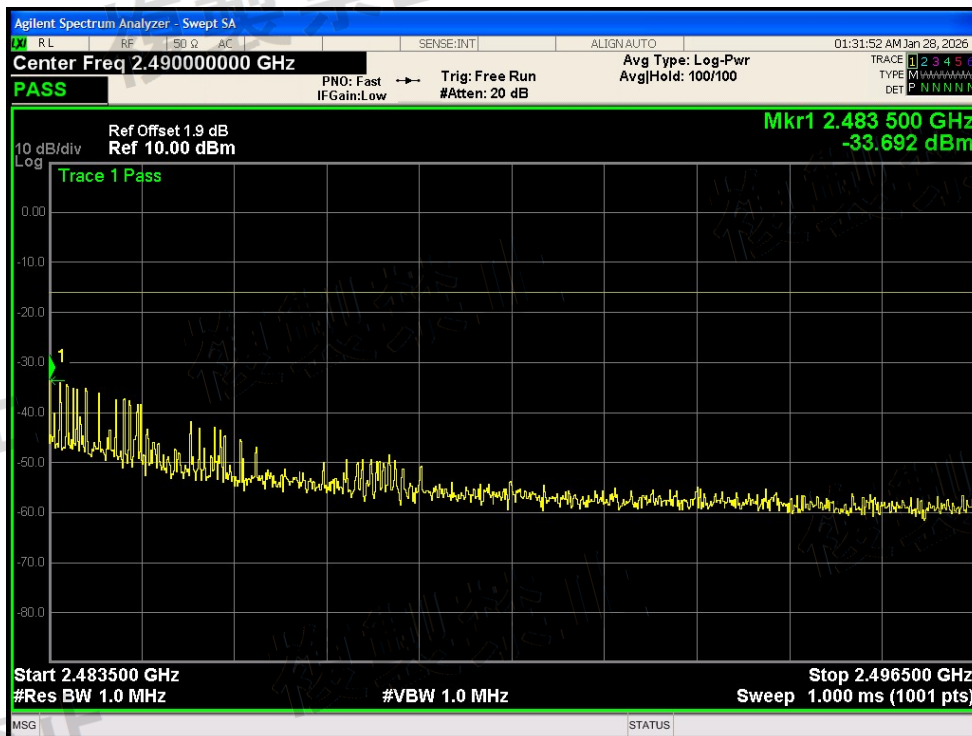
CH 78- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



CH 78- Frequency Band 3 (2387 MHz < f ≤ 2400 MHz)

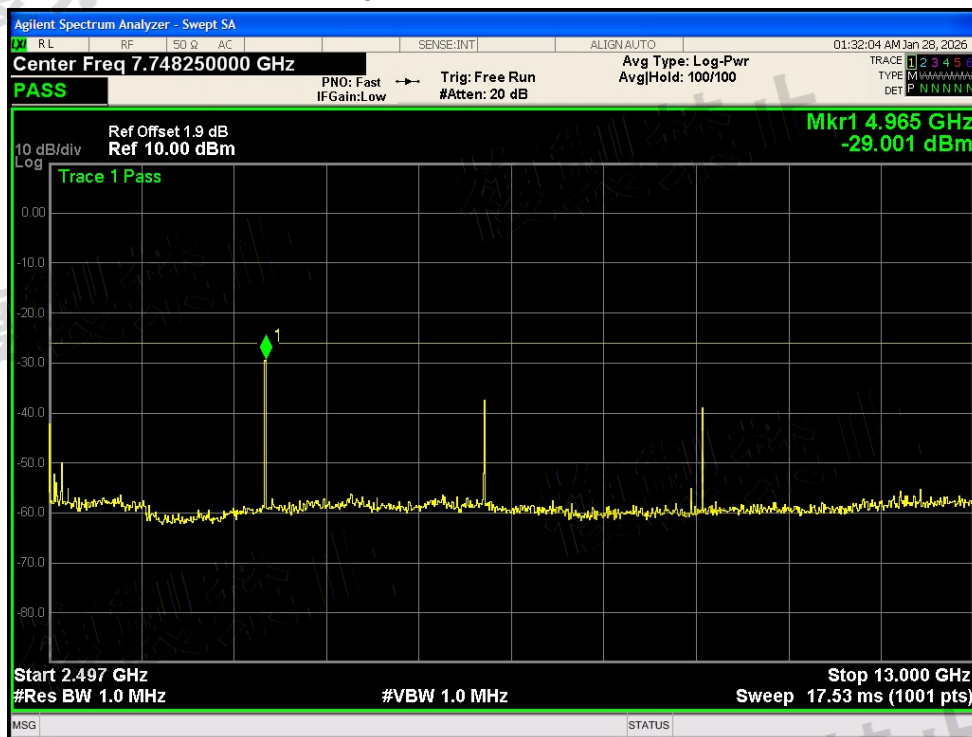


CH78- Frequency Band 4 (2483.5 MHz ≤ f < 2496.5 MHz)



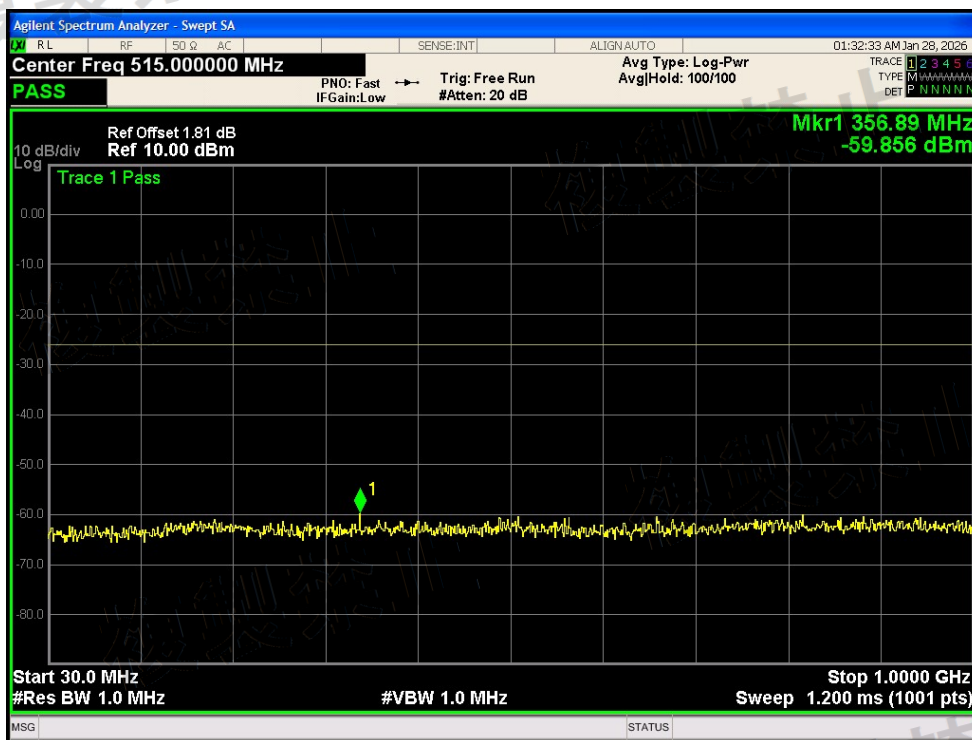


CH 78- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)

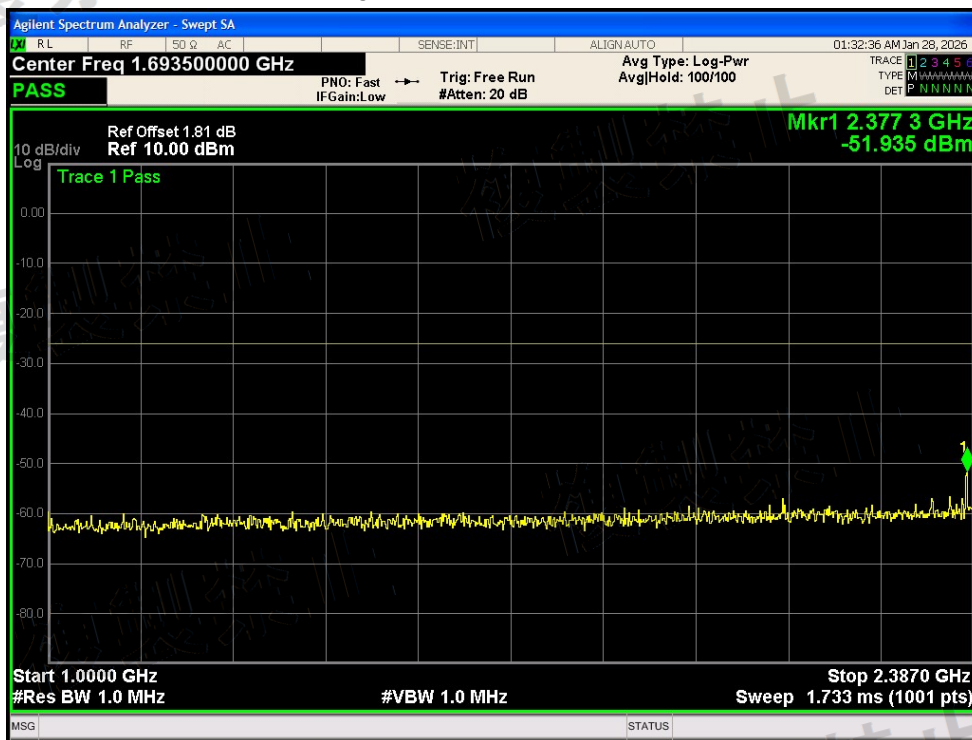


EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	250C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	8DPSK TX CH 00 ; Normal Voltage		

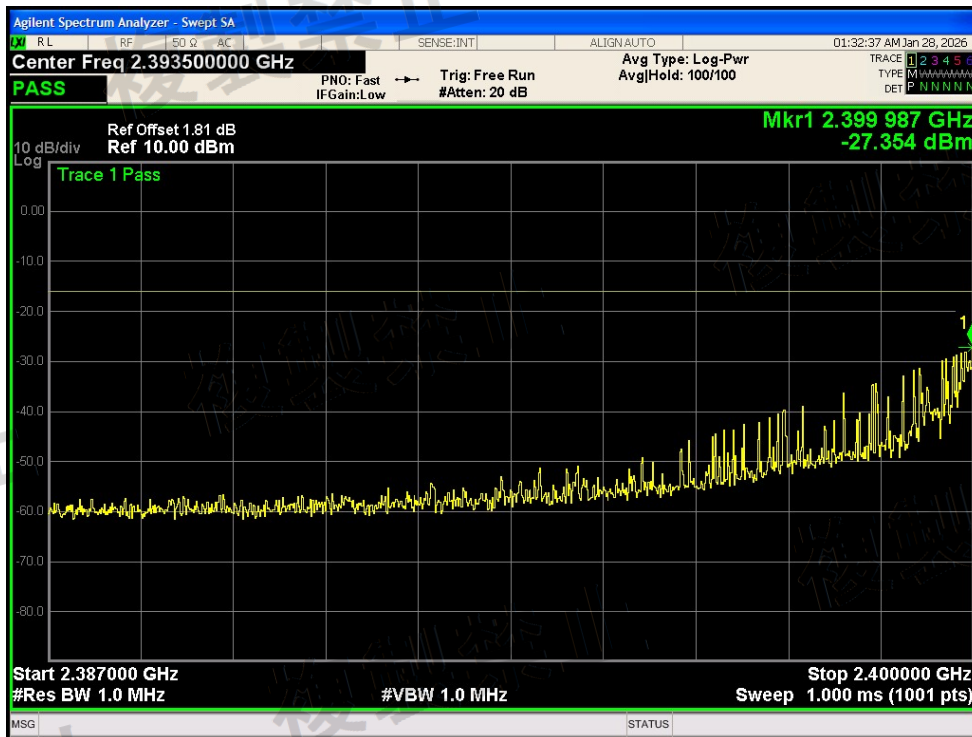
CH 00- Frequency Band 1 (30 MHz $\leq$ f $\leq$ 1000 MHz)



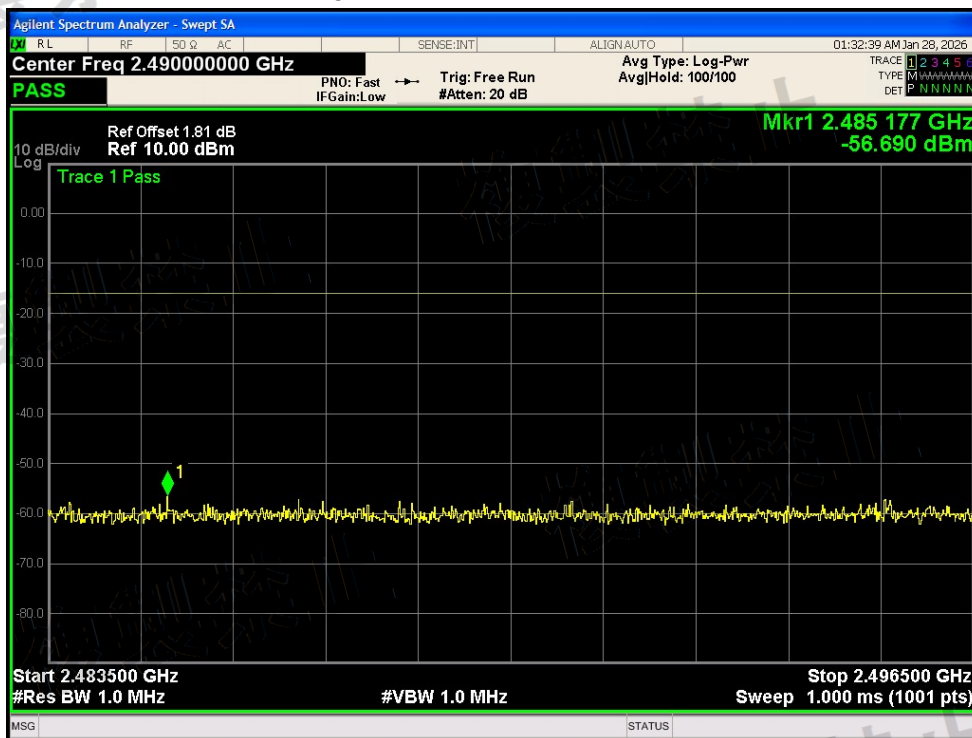
CH 00- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



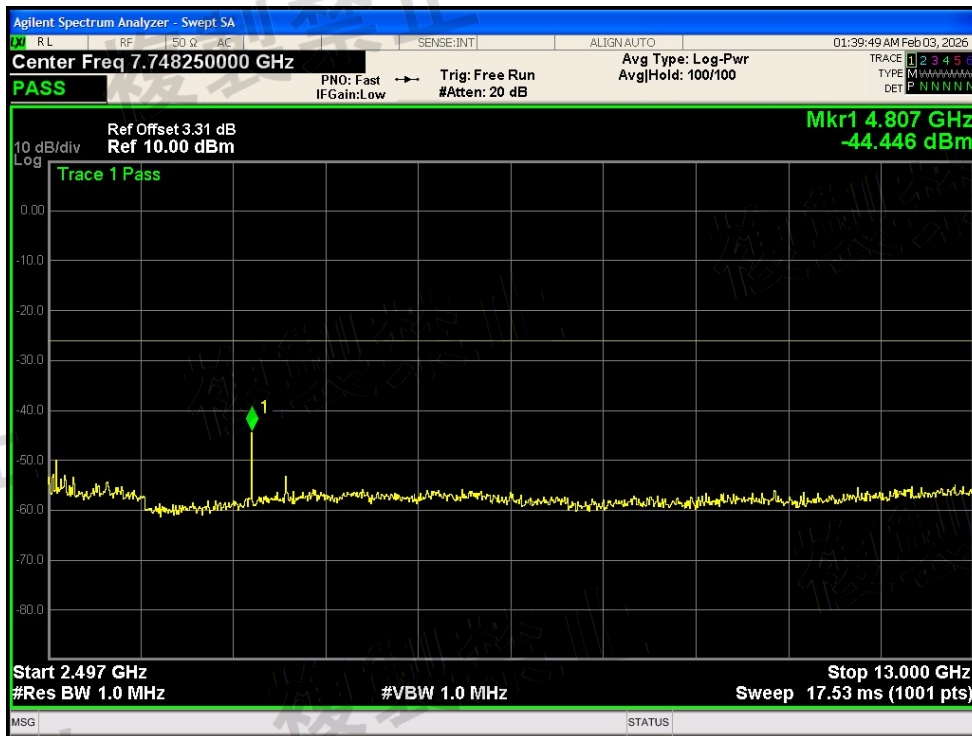
CH 00- Frequency Band 3 ($2387 \text{ MHz} < f \leq 2400 \text{ MHz}$)



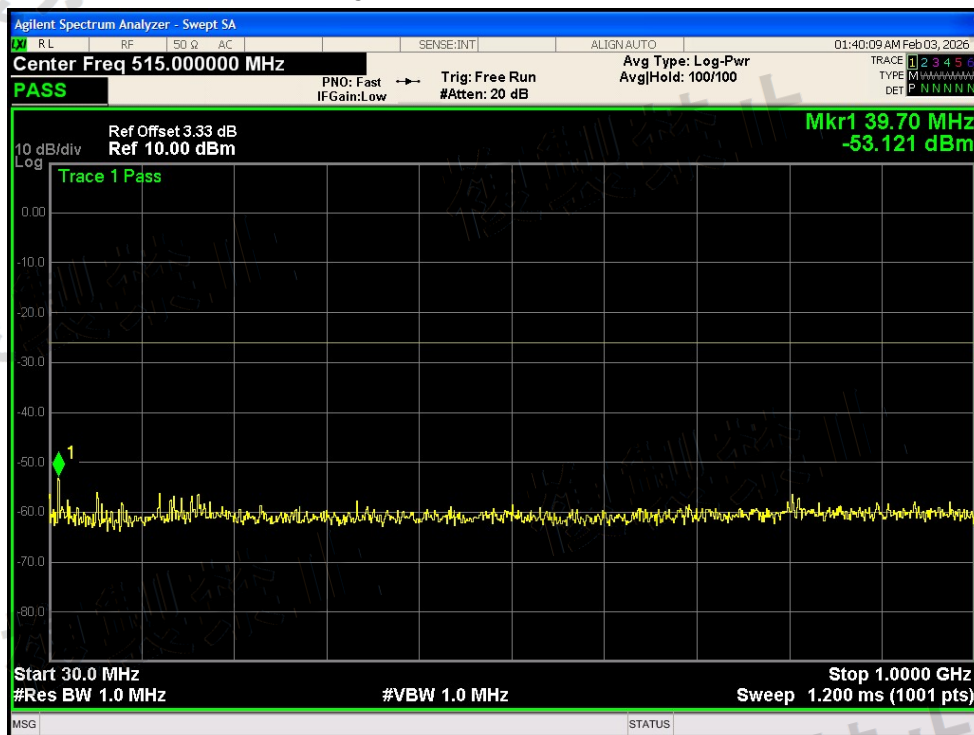
CH 00- Frequency Band 4 ($2483.5 \text{ MHz} \leq f < 2496.5 \text{ MHz}$)



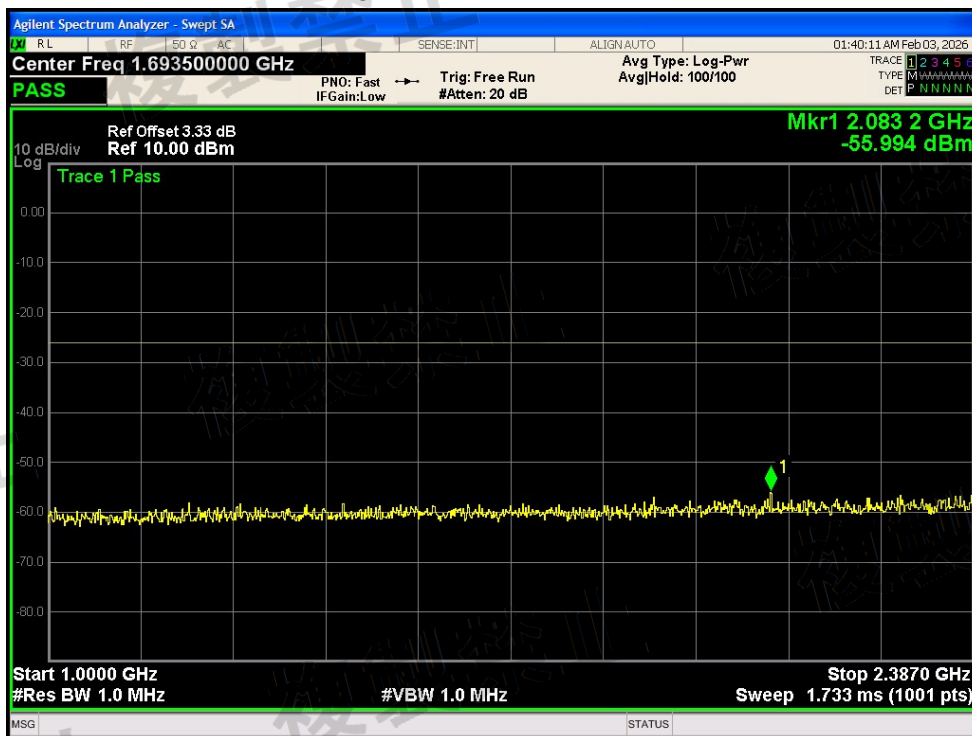
CH 00- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



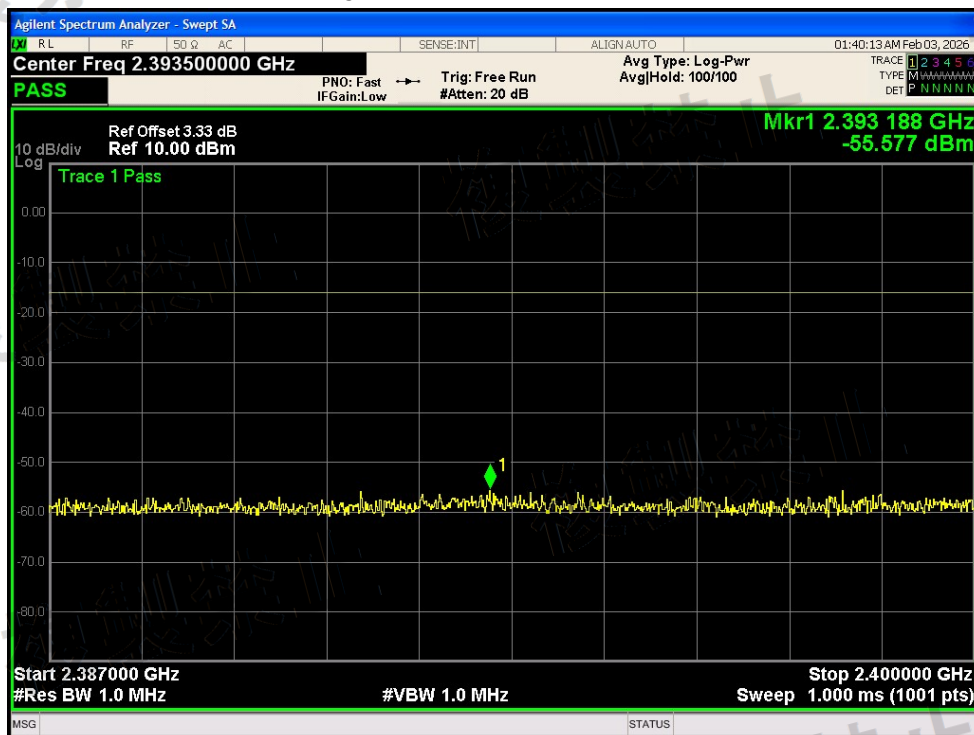
CH 39- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



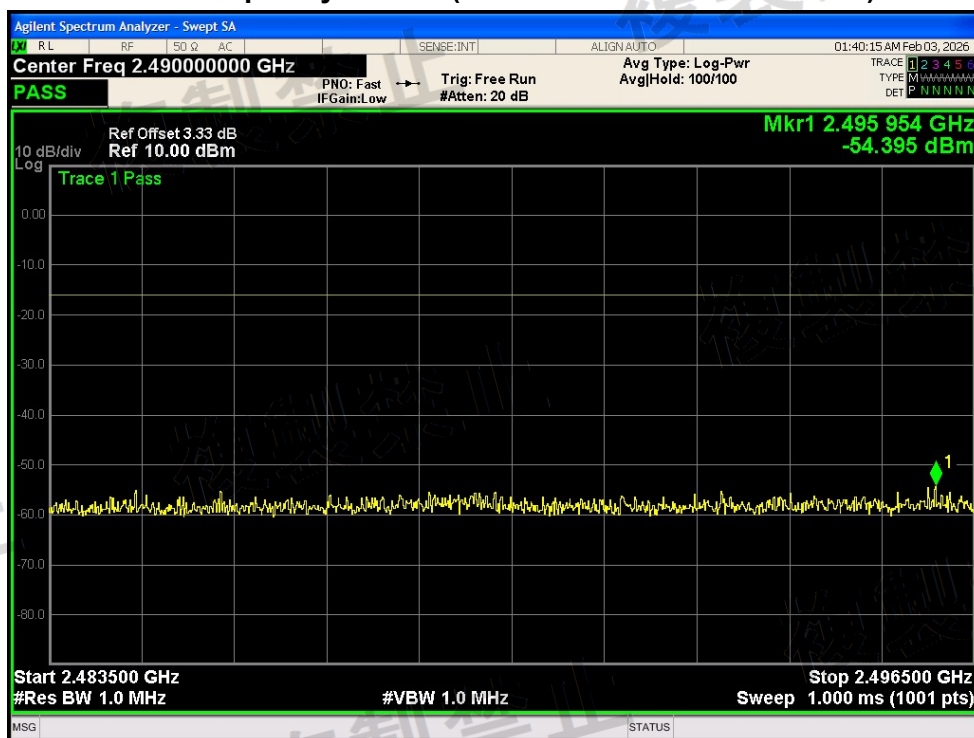
CH 39- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



CH 39- Frequency Band 3 ($2387 \text{ MHz} < f \leq 2400 \text{ MHz}$)

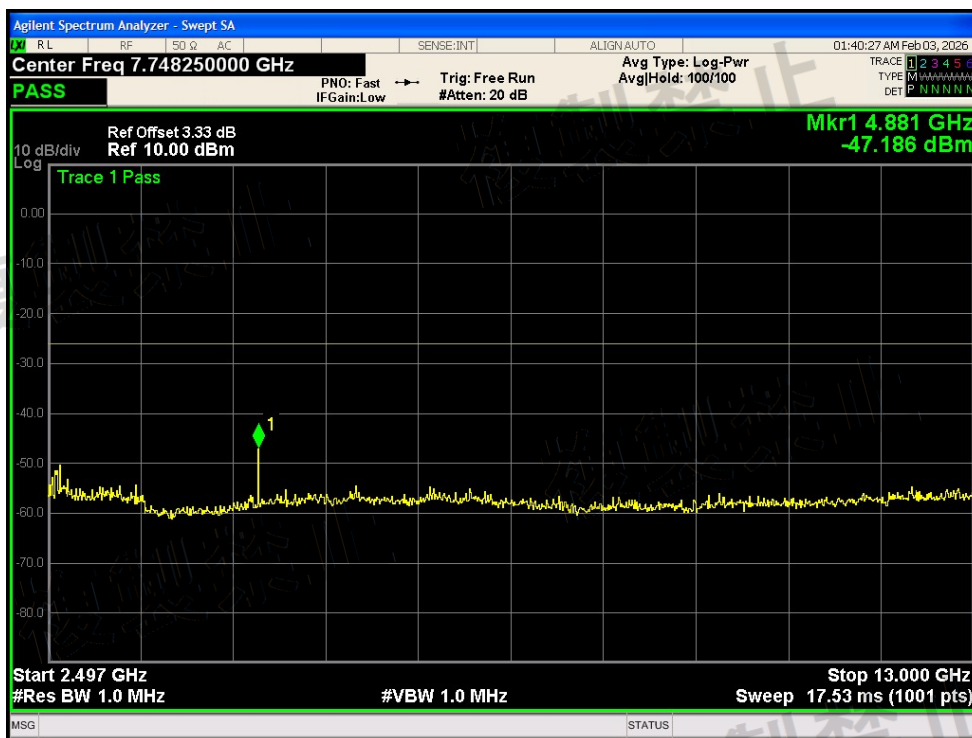


CH 39- Frequency Band 4 ($2483.5 \text{ MHz} \leq f < 2496.5 \text{ MHz}$)

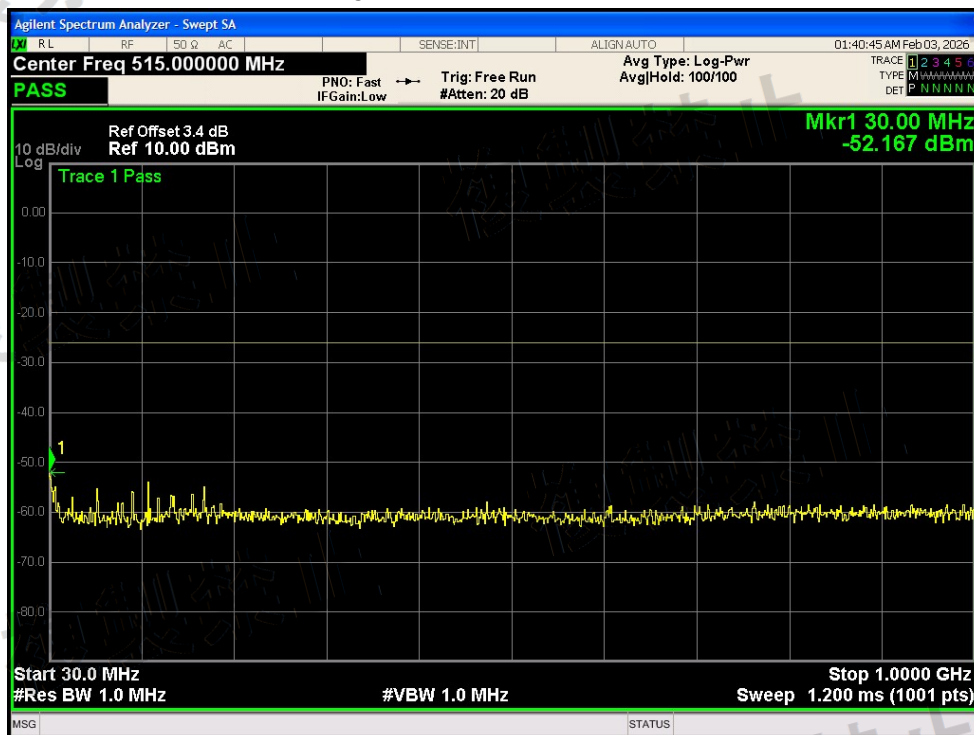




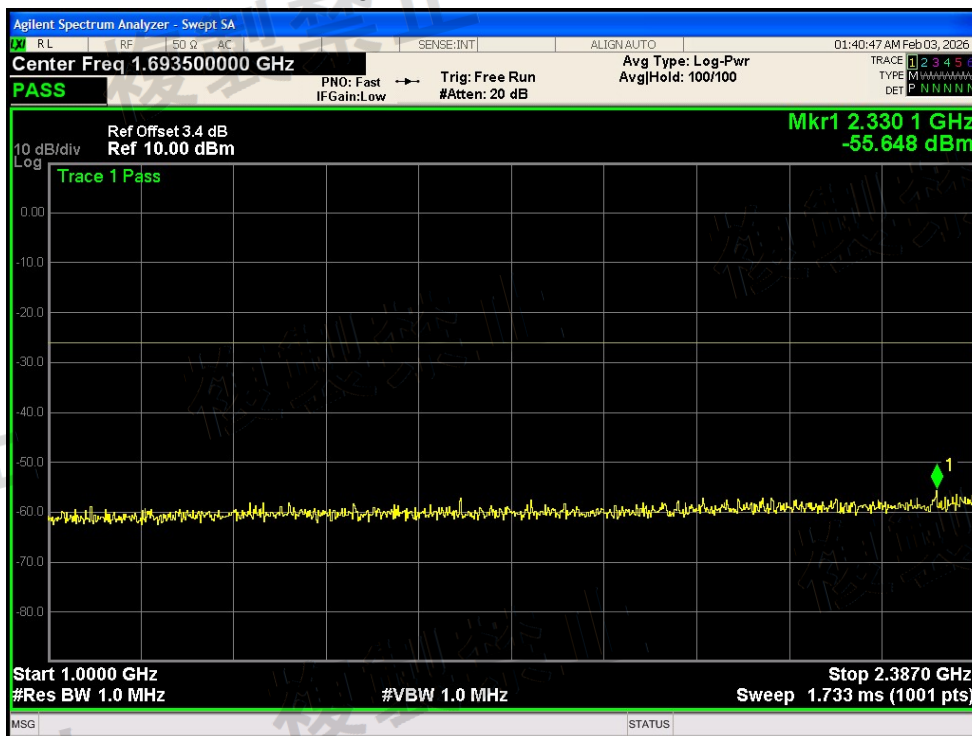
CH 39- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



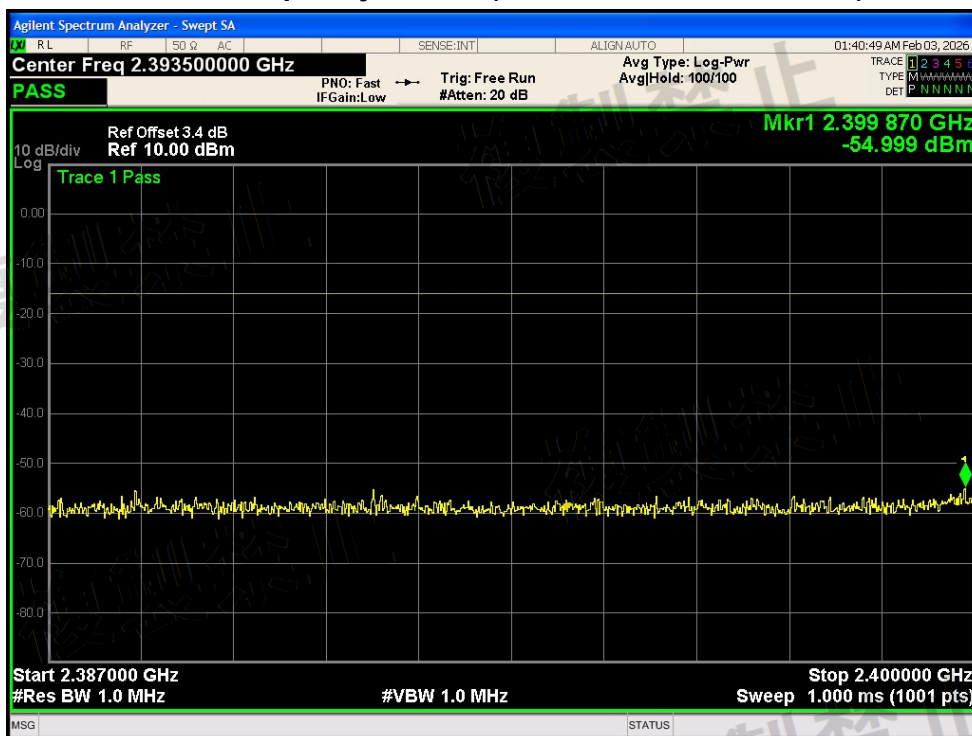
CH 78- Frequency Band 1 ($30 \text{ MHz} \leq f \leq 1000 \text{ MHz}$)



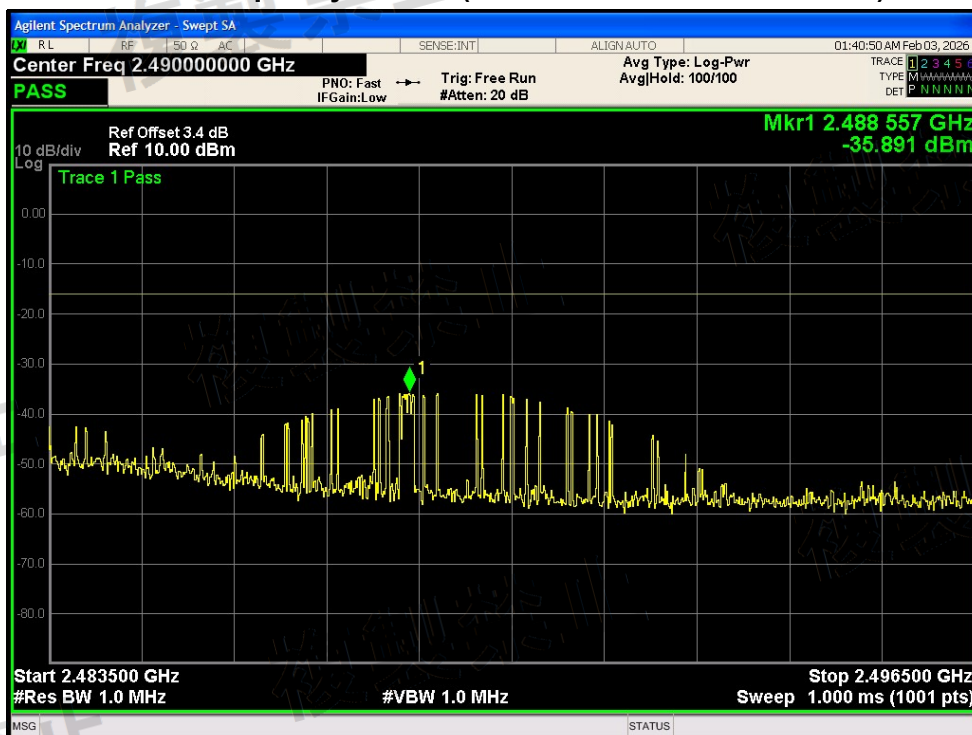
CH 78- Frequency Band 2 ($1000 \text{ MHz} < f \leq 2387 \text{ MHz}$)



CH 78- Frequency Band 3 (2387 MHz < f ≤ 2400 MHz)

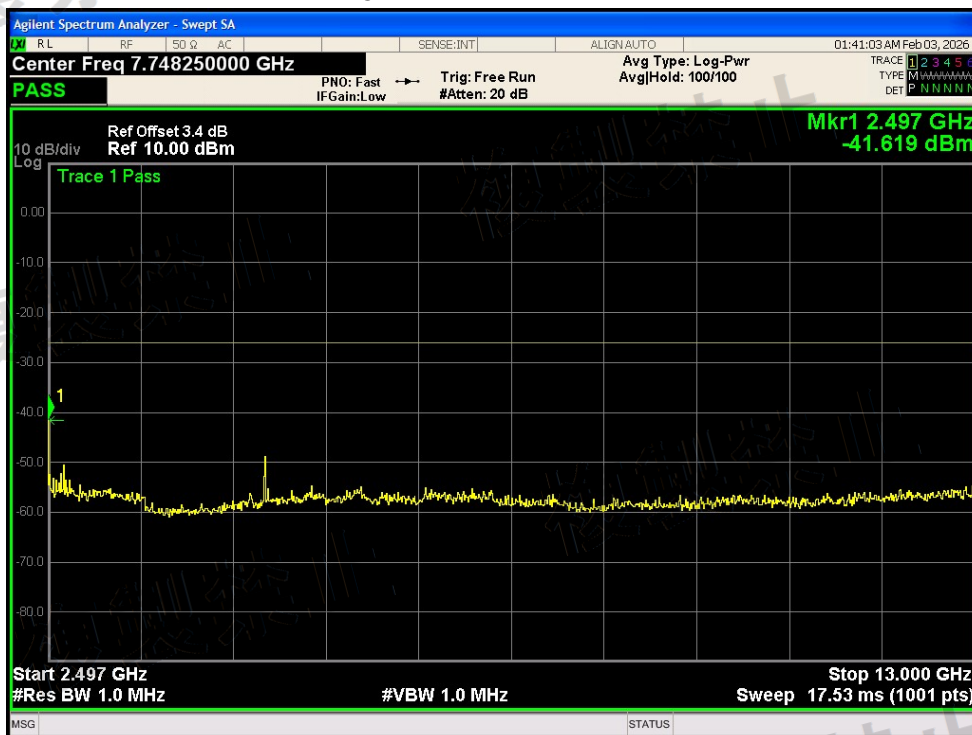


CH78- Frequency Band 4 (2483.5 MHz ≤ f < 2496.5 MHz)





CH 78- Frequency Band 5 ($2496.5 \text{ MHz} \leq f < 13 \text{ GHz}$)



8. RADIO INTERFERENCE PREVENTION CAPABILITY MEASUREMENT

8.1 LIMIT

Item	Limits
Identification code	≥ 48 bits

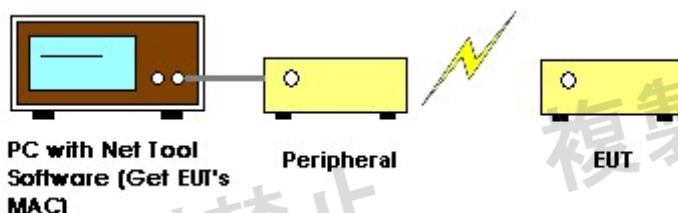
8.2 MEASURING ID CODE SOFTWARE

Item	Limits
MAC IP List	MAC Scan

8.3 TEST PROCEDURES

- In the case that the EUT has the function of automatically transmitting the identification code: a. Transmit the predetermined identification codes from EUT. b. Check the transmitted identification codes with the demodulator.
- In the case of receiving the identification code: a. Transmit the predetermined identification codes from the counterpart. b. Check if communication is normal. c. Transmit the signals other than predetermined ID codes from the counterpart. d. Check if the EUT stops the transmission, or if it displays that identification codes are different from the predetermined ones.

8.4 TEST SETUP LAYOUT



8.5 TEST DEVIATION

There is no deviation with the original standard.

8.6 EUT OPERATION DURING TEST

The EUT was programmed to be in normal transmitting mode.

8.7 TEST RESULT OF RADIO INTERFERENCE PREVENTION CAPABILITY

EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	3.7V
Operation Mode:	GFSK		

Bluetooth Device Address: 0x-6C-72-D8-E5-ED-68

9. DWELL TIME

9.1 LIMIT

Item	Limits
Hopping Freq. Dwell Time	$\leq 0.4 \text{ sec (In } 0.4 \text{ sec} \times \text{spreading rate)}$

9.2 MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	0 Hz
RB	1 MHz
VB	1 MHz
Detector	Peak
Trace	Max Hold
Sweep	Continuous

9.3 TEST PROCEDURES

- The transmitter output (antenna port) was connected to the spectrum analyzer
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.
- Set the EUT for DH5, DH3 and DH1 packet transmitting.
- Measure the maximum time duration of one single pulse.
- Dwell time = $[\text{spreading rate}/79] \times \text{duty-cycle} \times 0.4 \text{ seconds}$. (to be determined for each mode, DH1, DH3, DH5)

9.4 TEST SETUP LAYOUT



9.5 TEST RESULT

EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Test Mode:	GFSK		

Dwell Time = (One Pulse Time * (Burst Count in the specified period time);
the specified period time = 0.4s * (Hopping channel in use)."

Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT

Modulation rate of EUT is below:

GFSK modulation: 1Mbps

$\pi/4$ -DQPSK modulation: 2Mbps

8DPSK modulation: 3Mbps

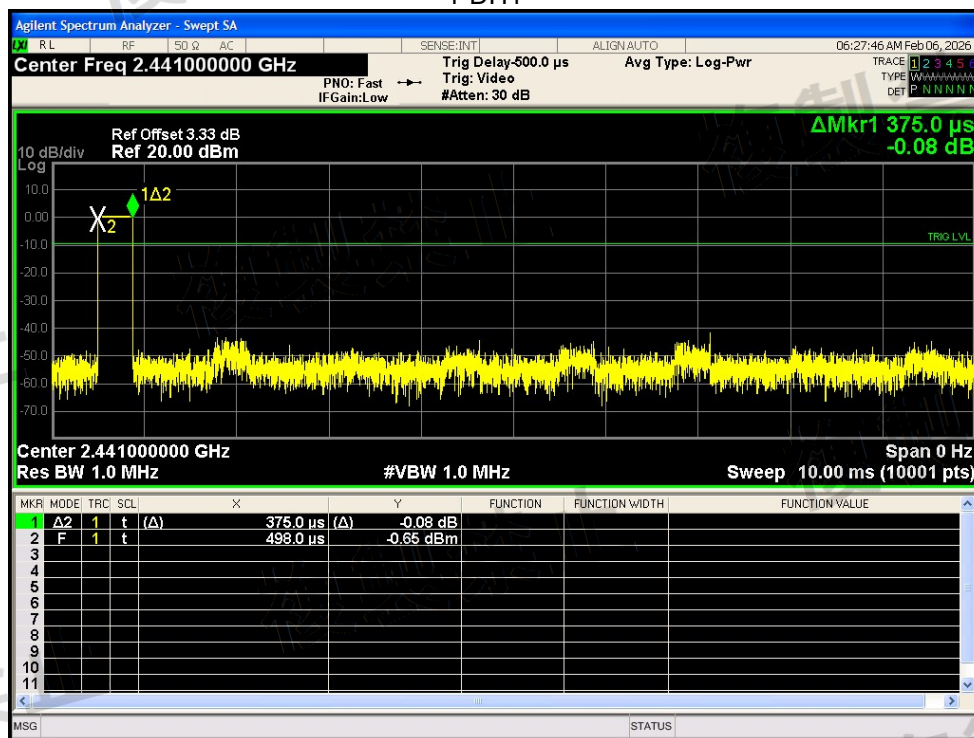
Spread Spectrum Factor = Spread Spectrum Bandwidth / Modulation Rate

Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
=71.097

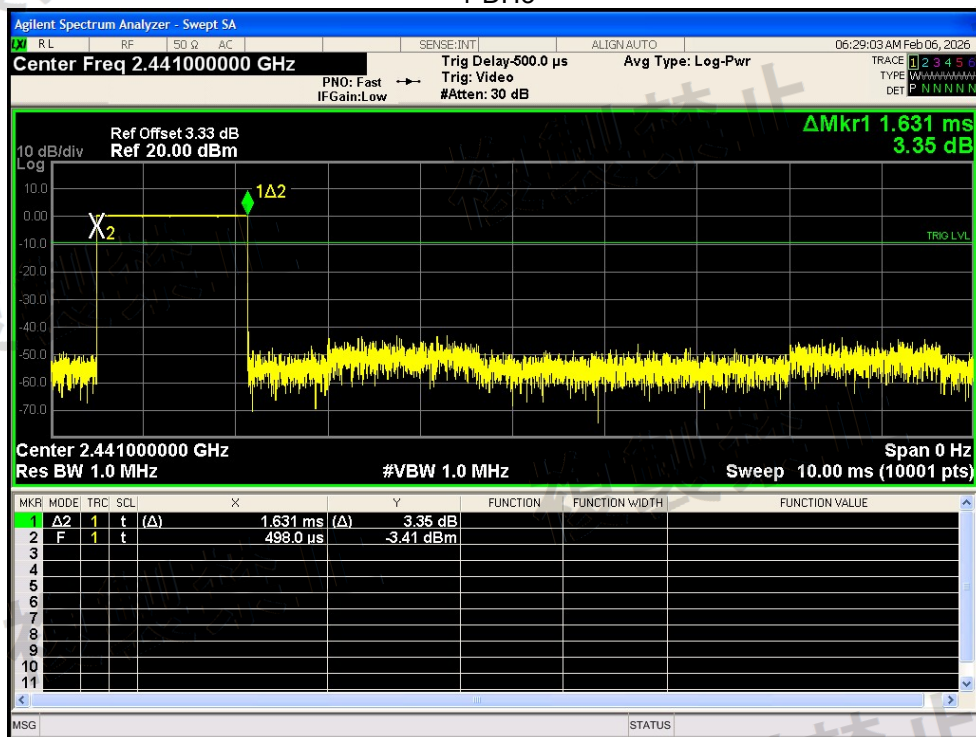
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.375	119.25	318	0.375	400	Pass
NVNT	1-DH3	2441	1.631	275.639	169	1.631	400	Pass
NVNT	1-DH5	2441	2.879	333.964	116	2.879	400	Pass

Modulation type:	GFSK	Test voltage:	Normal
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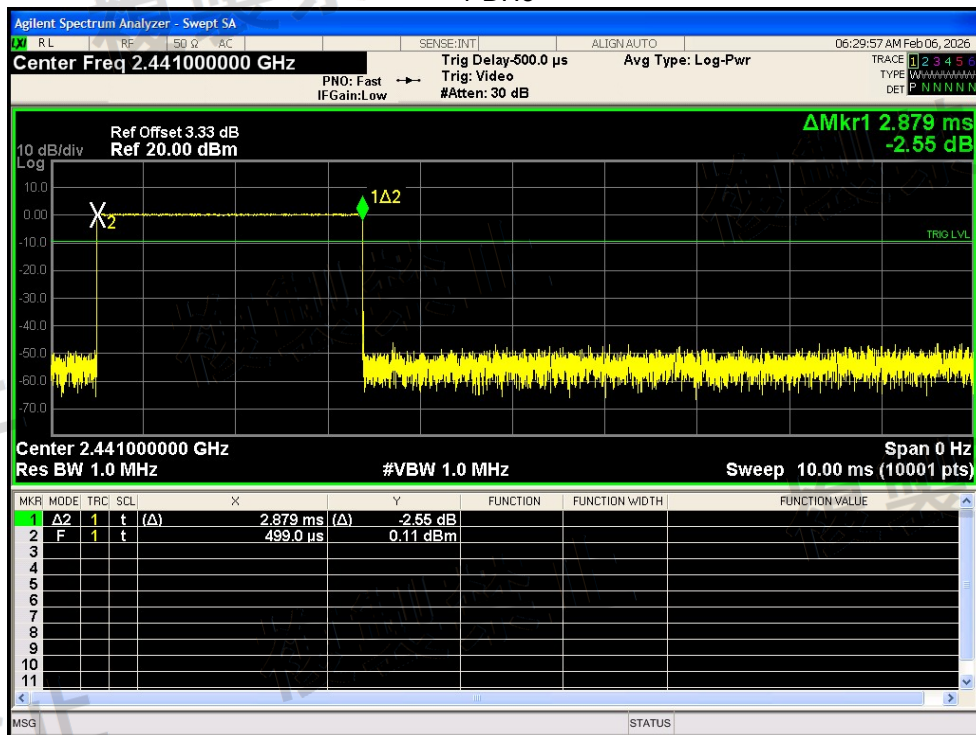
1-DH1



1-DH3



1-DH5

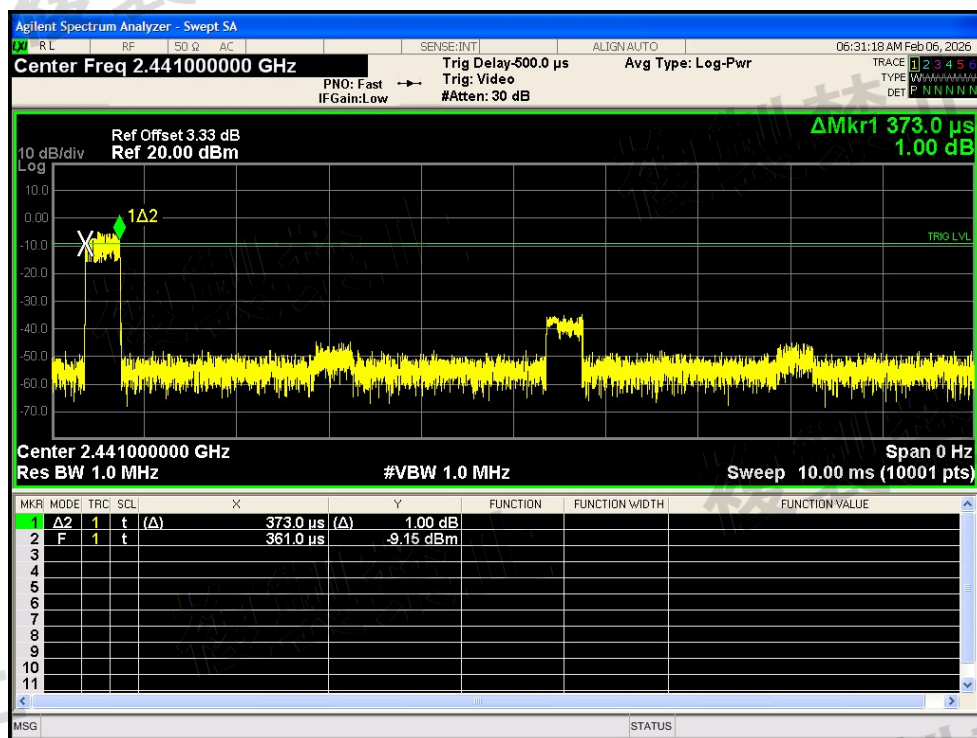


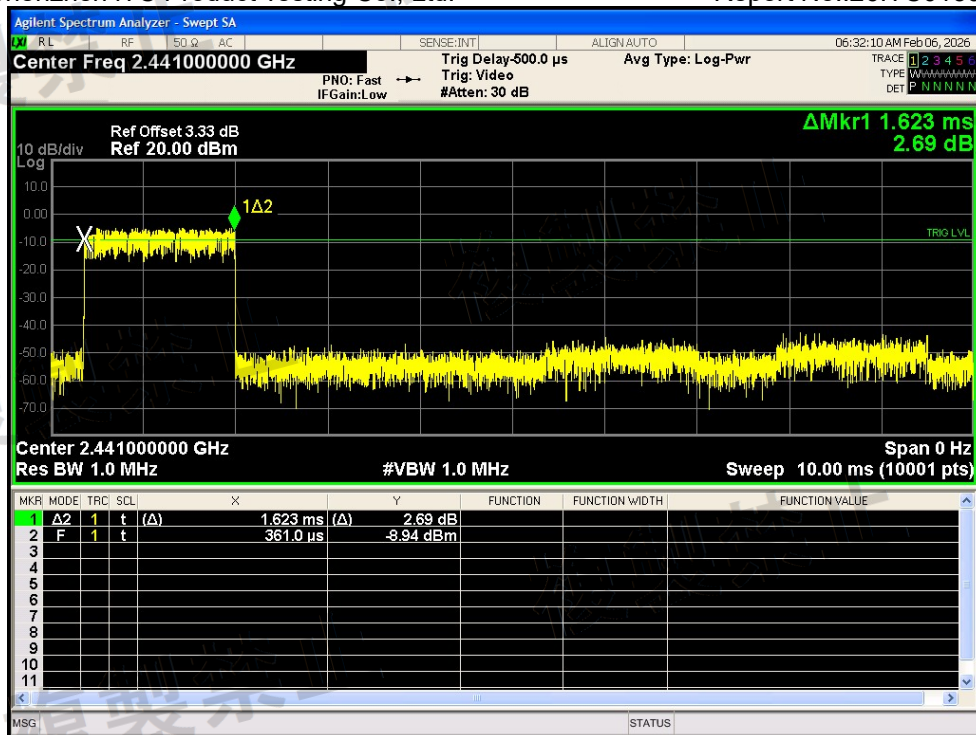
EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Test Mode:	π /4-DPSK		

Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
=71.218/2=35.609

Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	2-DH1	2441	0.373	118.614	318	31600	400	Pass
NVNT	2-DH3	2441	1.623	253.188	156	31600	400	Pass
NVNT	2-DH5	2441	2.885	294.27	102	31600	400	Pass

Modulation type:	π /4-DQPSK	Test voltage:	Normal
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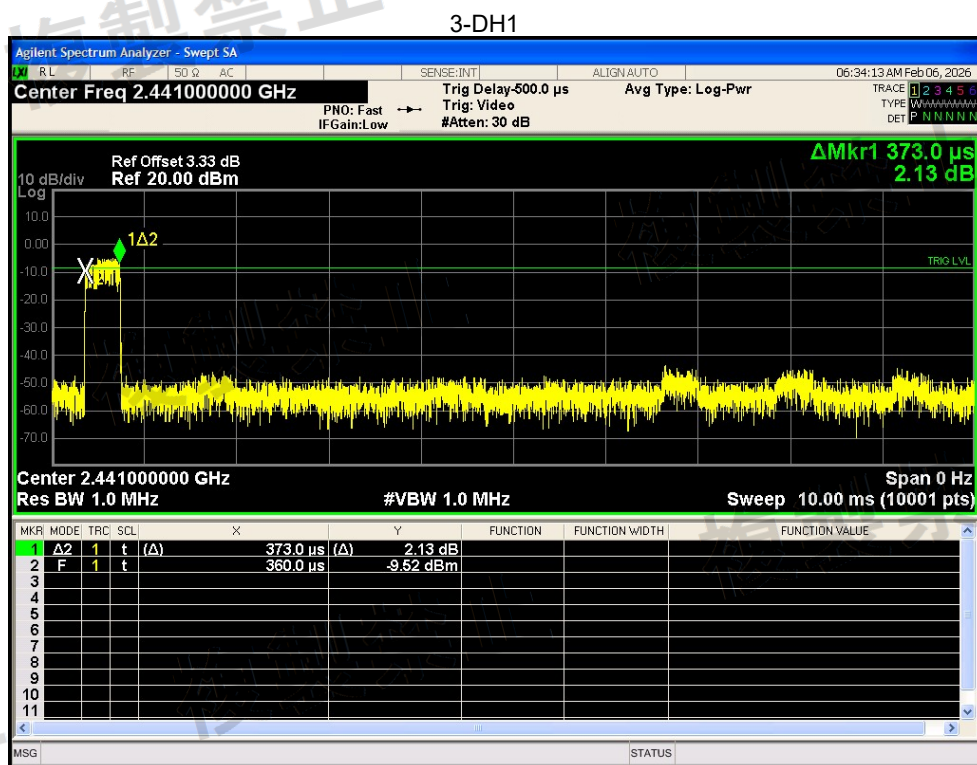


EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25 ⁰ C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Test Mode:	8DPSK		

Spread Spectrum Factor = Spread Spectrum Bandwidth / modulation rate of EUT.
= 71.249/3=23.749

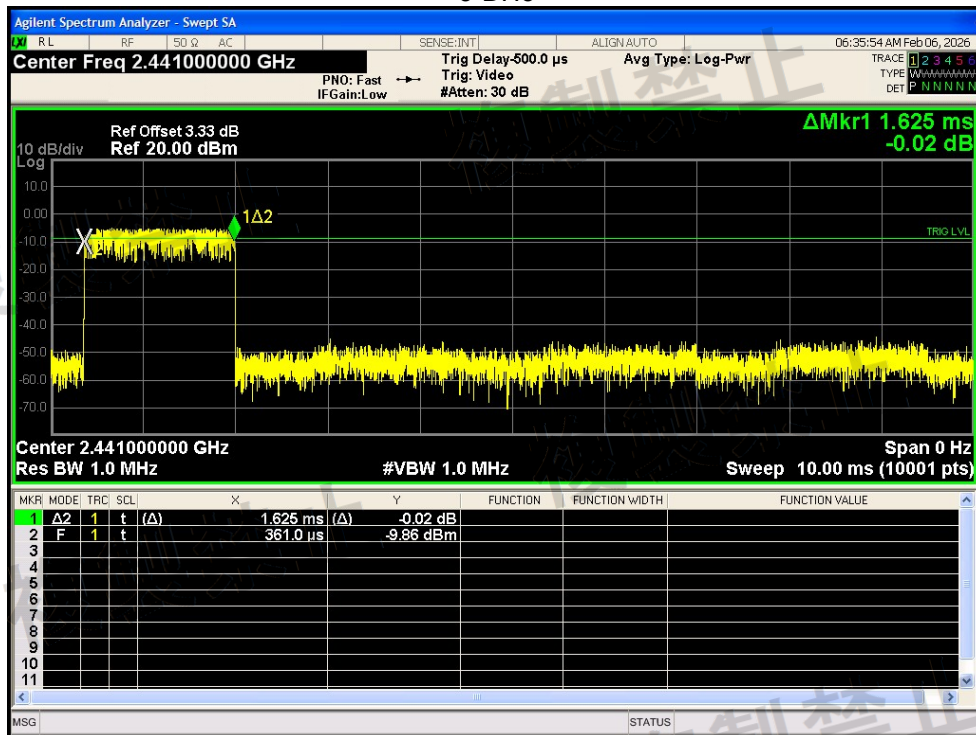
Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	3-DH1	2441	0.373	118.241	317	31600	400	Pass
NVNT	3-DH3	2441	1.625	238.875	147	31600	400	Pass
NVNT	3-DH5	2441	2.887	306.022	106	31600	400	Pass

Modulation type:	$\pi/4$ -DQPSK	Test voltage:	Normal
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3-DH3



3-DH5



10. CARRIER SENSE

Not applicable, Since the EUT belong to Bluetooth

11. IMITATION OF COLLATERAL EMISSION OF RECEIVER MEASUREMENT

11.1 LIMIT

Item	Limits
RX Spurious Emission:	$\leq 4\text{nW}$ ($f < 1\text{GHz}$)
	$\leq 20\text{nW}$ ($1\text{GHz} \leq f$)

11.2 MEASURING INSTRUMENTS AND SETTING

Please refer to section 5 in this report. The following table is the setting of Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
RB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
VB	100 kHz (below 1GHz emissions) 1 MHz (above 1GHz emissions)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

11.3 TEST PROCEDURES

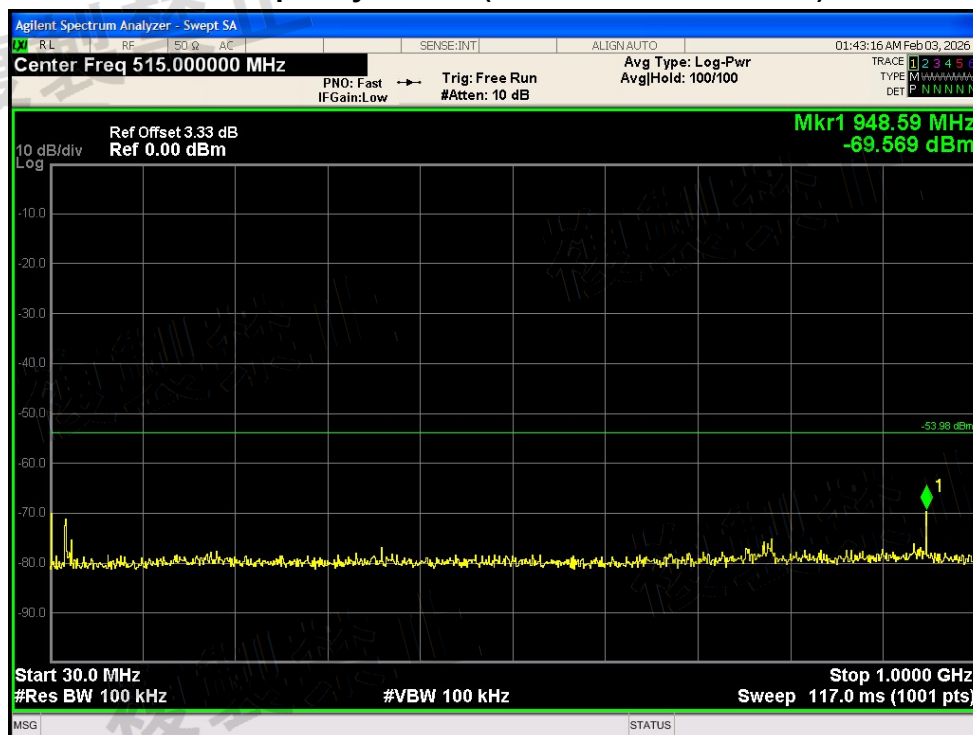
- EUT have the continuous reception mode and fixed only one channelize.
- Setting of SA is following as RB / VB: 100 kHz (below 1GHz emissions) / 1 MHz (above 1GHz emissions) /
AT: 10dB / Ref: 0dBm / Sweep time: Auto / Sweep Mode: Continuous sweep / Detect mode: Positive peak / Trace mode: Max hold
- SA set RB: 100kHz and VB: 100kHz. Then adjust to start frequency 30MHz and stop frequency 1000MHz. Search to mark peak reading value + cable loss shall be less than 4nW
- SA set RB: 1MHz and VB: 1MHz. Then adjust to start frequency 1000MHz and stop frequency 12500MHz. Search to mark peak reading value + cable loss shall be less than 20nW
- If power level of lower emissions are more than 1/10 of limit (.0.4nW for $f < 1\text{GHz}$, 2nW for $f \geq 1\text{GHz}$), all those are to be indicated in the 2nd and 3rd lines. If others are 1/10 or less more of the limit, no necessary to be indicated.

11.4 TEST RESULT

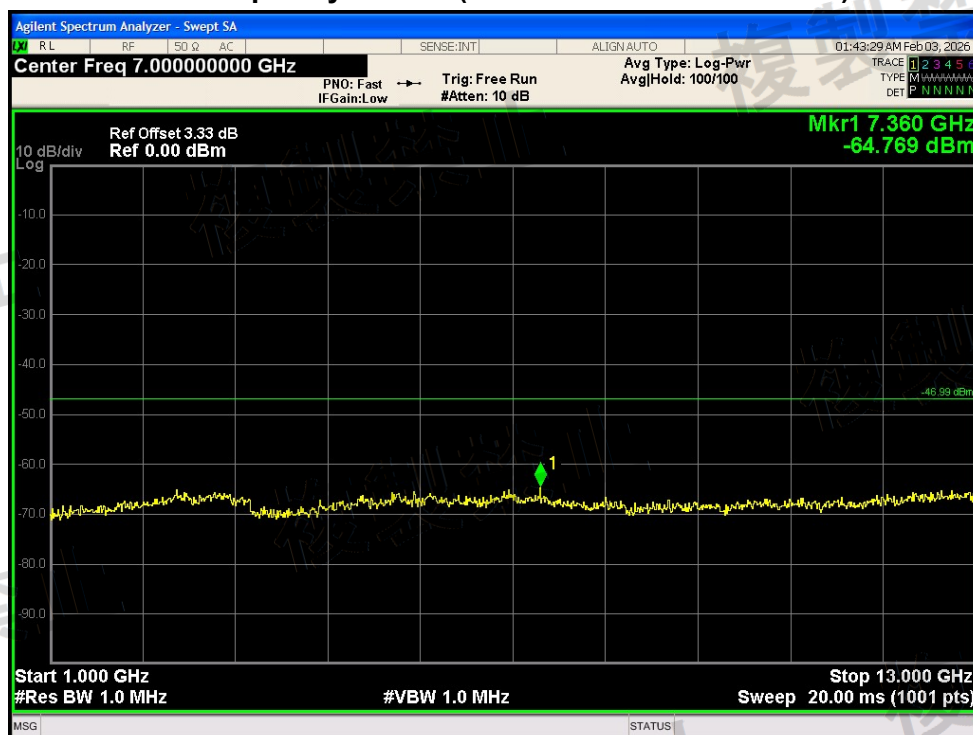
Mode	Frequency (MHz)	Range (MHz)	Emission Frequency (MHz)	Max Value (dBm)	Limit (dBm)	Verdict
1-DH1	2441	30-1000	948.59	-69.57	-54	Pass
1-DH1	2441	1000-12500	7360.00	-64.77	-47	Pass
2-DH1	2441	30-1000	912.70	-70.22	-54	Pass
2-DH1	2441	1000-12500	1756.00	-57.25	-47	Pass
3-DH1	2441	30-1000	885.54	-76.69	-54	Pass
3-DH1	2441	1000-12500	3592.00	-55.66	-47	Pass

EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	GFSK		

RX-Frequency Band 1 ($30 \text{ MHz} \leq f < 1000 \text{ MHz}$)

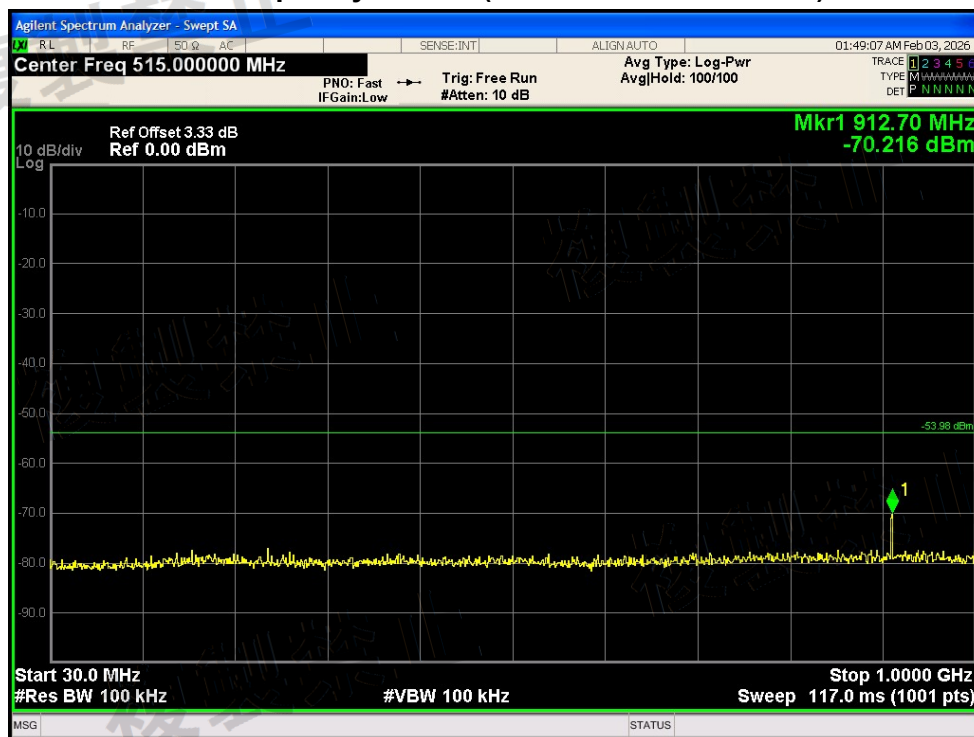


RX-Frequency Band 2 ($1000 \text{ MHz} \leq f < 12500 \text{ MHz}$)

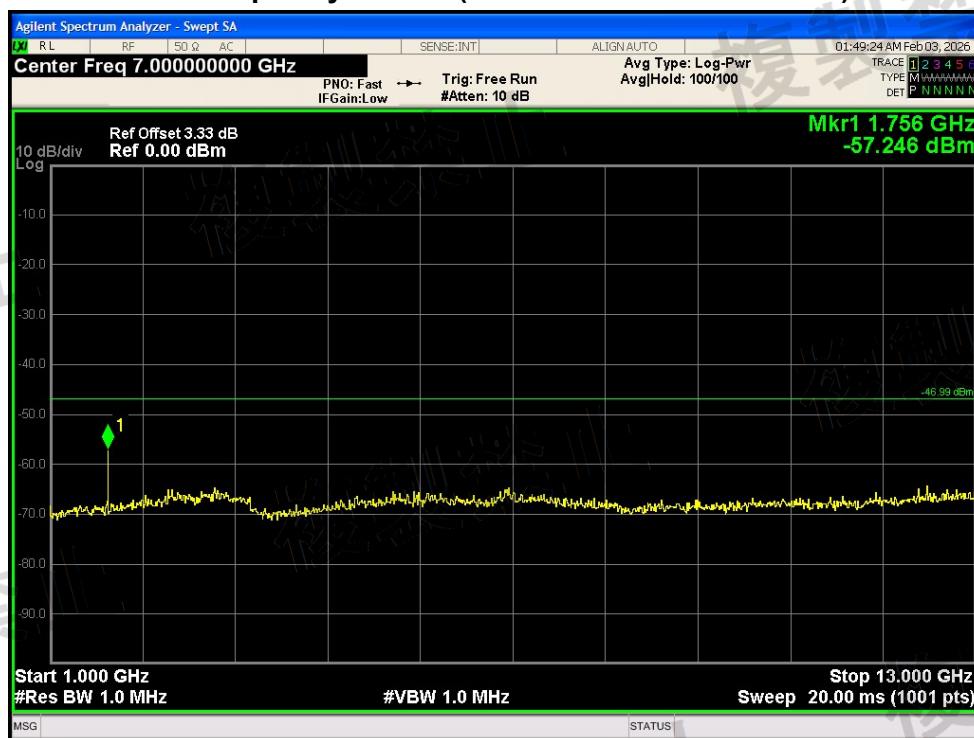


EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	$\pi/4$ -DPSK		

RX-Frequency Band 1 ($30 \text{ MHz} \leq f < 1000 \text{ MHz}$)

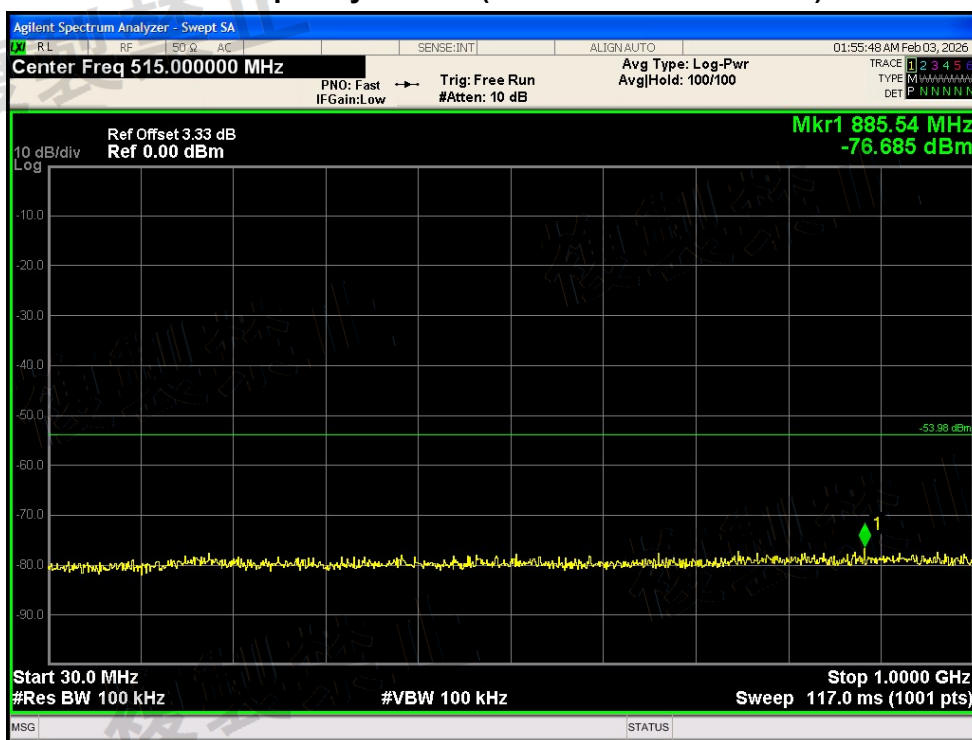


RX-Frequency Band 2 ($1000 \text{ MHz} \leq f < 12500 \text{ MHz}$)

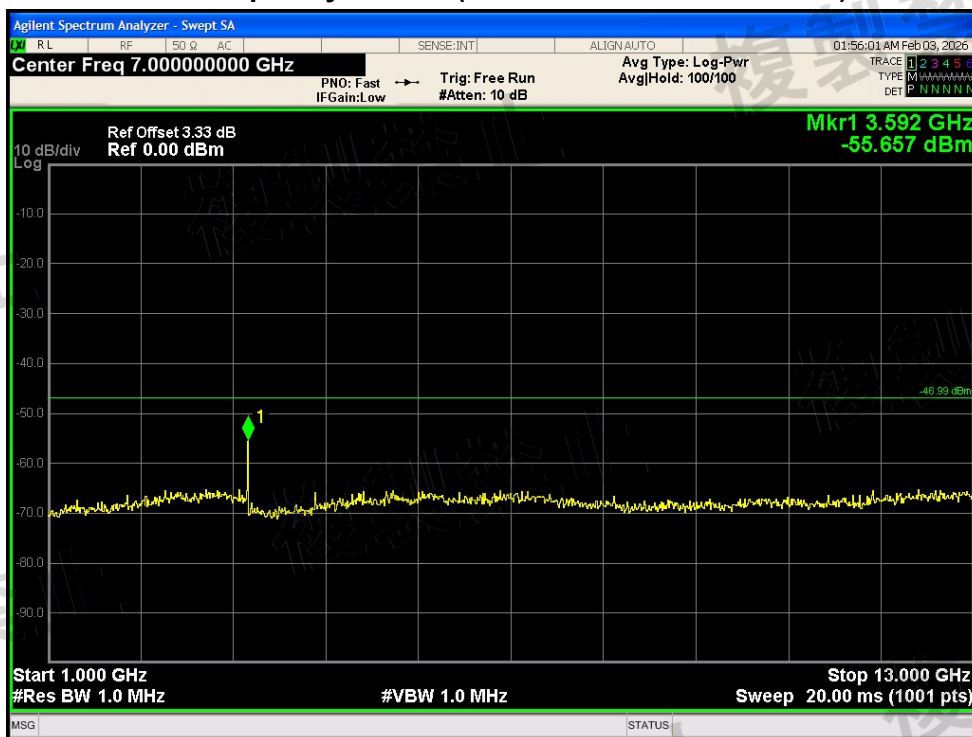


EUT:	D mooster Wireless Bluetooth Earphones		
Temperature:	25°C		
Humidity:	55 % RH	Test Voltage	DC 3.7V
Operation Mode:	8DPSK		

RX-Frequency Band 1 ($30\text{ MHz} \leq f < 1000\text{ MHz}$)



RX-Frequency Band 2 ($1000\text{ MHz} \leq f < 12500\text{ MHz}$)



12. EUT TEST PHOTO

Measurement Photos





13. EUT PHOTOS

Reference to the **appendix II_External photos** and **appendix II_Internal photos** for details.

※※※※※ END OF REPORT ※※※※※